

United States
Department of
Agriculture

Forest Service

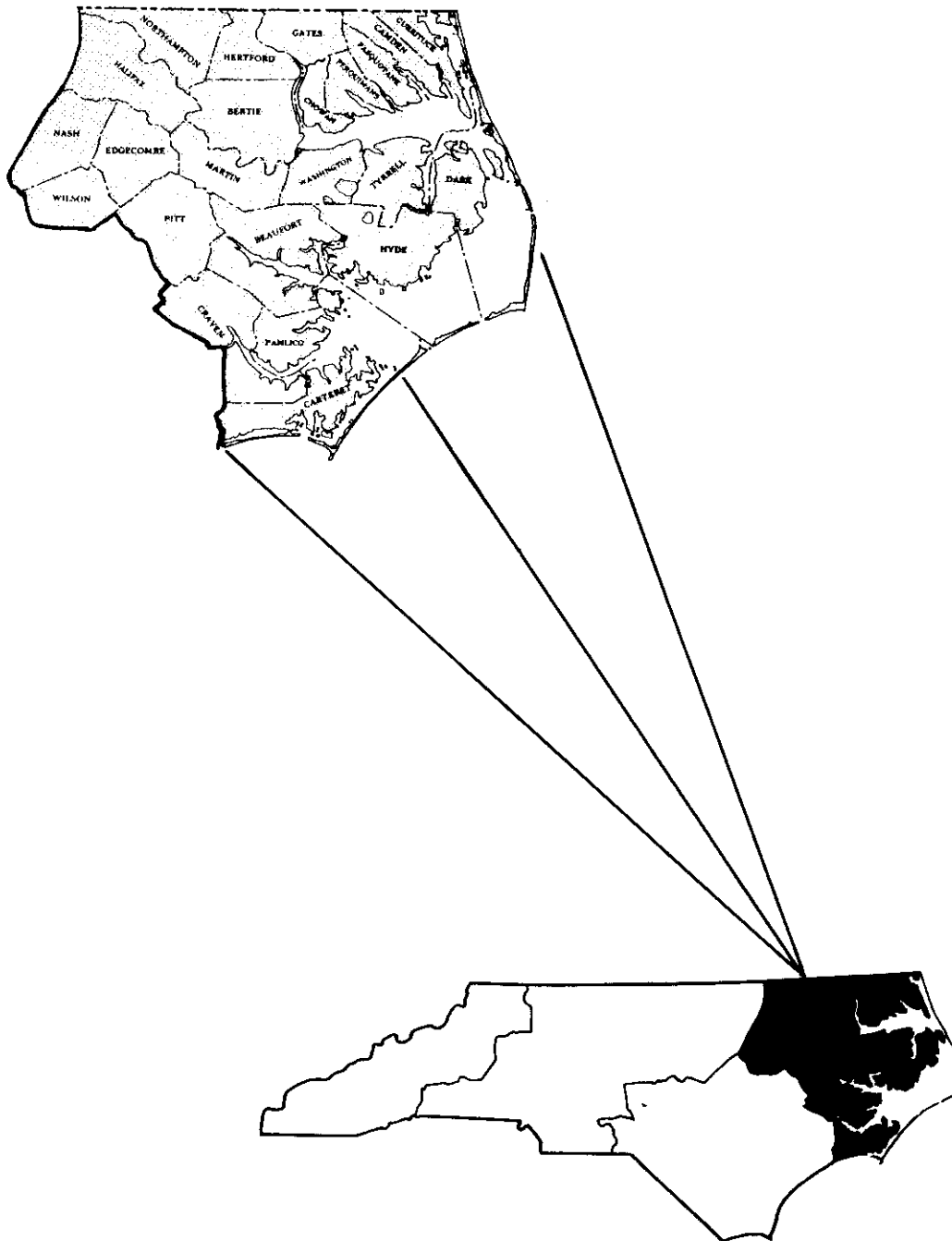


Southeastern Forest
Experiment Station

Resource Bulletin
SE-74

Forest Statistics for the Northern Coastal Plain of North Carolina, 1984

Edgar L. Davenport



August 1984

Southeastern Forest Experiment Station
200 Weaver Blvd.
Asheville, North Carolina 28804

**Forest Statistics for the
Northern Coastal Plain of North Carolina, 1984**

**Edgar L. Davenport, Forestry Technician
Forest Inventory and Analysis
Asheville, North Carolina**

Foreword

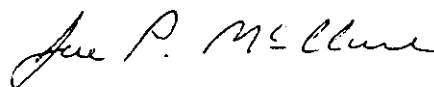
This report highlights the principal findings of the fifth forest inventory in the Northern Coastal Plain of North Carolina. Fieldwork began in June 1983 and was completed in December 1983. Four previous surveys, completed in 1937, 1955, 1963, and 1974, provide statistics for measuring changes and trends over the past 46 years. The primary emphasis in this report is on the changes and trends since 1974. Previously reported figures have been adjusted to provide the best estimate of change.

Periodic surveys of the forest resource are authorized by the Forest and Rangeland Renewable Resources Research Act of 1978. These surveys are a continuing, nationwide undertaking by the Regional Experiment Stations of the Forest Service, USDA. In Florida, Georgia, North Carolina, South Carolina, and Virginia, these surveys are administered by the Forest Inventory and Analysis (Forest Survey) Research Work Unit at the Southeastern Forest Experiment Station, with headquarters in Asheville, N.C. The primary objective of the survey is to periodically inventory and evaluate all forest and related resources. These multi-resource data help provide a basis for formulating forest policies and programs and

for the orderly development and use of the resources. This report deals only with the extent and condition of forest lands, associated timber volumes, and rates of timber growth and removals.

The 23-county area covered by this report is one of four survey units in North Carolina. Similar reports for the other two units will be issued as the Statewide inventory progresses. When completed, these inventories will provide updated statistics on the timber resource for all of North Carolina.

The Southeastern Station gratefully acknowledges the cooperation and assistance provided by the North Carolina Department of Natural Resources and Community Development in collecting field data. Appreciation is also expressed for the excellent cooperation of other public agencies, forest industry, and other private landowners in providing information and access to the sample locations.



JOE P. McCLURE
Project Leader

Contents

	<u>Page</u>		<u>Page</u>
Since 1974 in the Northern Coastal Plain of North Carolina.....	1	13. Area of commercial forest land, by stand-age and broad management classes, public ownerships.....	23
How the Inventory Is Made.....	3	14. Area of commercial forest land, by stand-age and broad management classes, forest industry.....	23
Reliability of the Data.....	3	15. Area of commercial forest land, by stand-age and broad management classes, other private ownerships.....	24
Definitions of Terms.....	5	16. Area of commercial forest land, by broad management and stand-volume classes.....	24
County Tables.....	12	17. Volume of growing stock on commercial forest land, by broad management class, species group, and stand-age class.....	25
1. Area, by county and land class.....	12	18. Net annual growth of growing stock on commercial forest land, by broad management class, species group, and stand-age class.....	26
2. Area of commercial forest land, by county and ownership class.....	13	19. Annual removals of growing stock on commercial forest land, by broad management class, species group, and stand-age class.....	27
3. Area of commercial forest land, by county and forest-type group.....	14	20. Merchantable volume of all live trees and growing stock on commercial forest land, by forest-type group and species group.....	28
4. Area of commercial forest land, by county and stand-size class.....	15	21. Area of commercial forest land treated or disturbed annually, by treatment or disturbance and ownership class.....	29
5. Area of commercial forest land, by county and site class.....	16	22. Area of commercial forest land treated or disturbed annually and retained in commercial forest land, by treatment or disturbance and broad management class.....	29
6. Area of commercial forest land, by county and stocking classes of growing-stock trees.....	17	23. Area of commercial forest land regenerated annually, by type of regeneration and broad management class....	30
7. Volume of sawtimber and growing stock on commercial forest land, by county and species group.....	18		
8. Net annual growth of sawtimber and growing stock on commercial forest land, by county and species group.....	19		
9. Annual removals of sawtimber and growing stock on commercial forest land, by county and species group.....	20		
Unit Tables			
10. Area of commercial forest land, by forest type and ownership class.....	21		
11. Area of commercial forest land, by ownership and stocking classes of growing-stock trees.....	22		
12. Area of commercial forest land, by stand-age and broad management classes, all ownerships.....	22		

	<u>Page</u>		<u>Page</u>
24. Area of commercial forest land, by treatment opportunity and broad management classes.....	30	36. Volume of sawtimber on commercial forest land, by species, size class, and log grade.....	40
25. Area of commercial forest land, by treatment opportunity and ownership classes.....	31	37. Cubic volume in the merchantable saw-log portion of sawtimber trees, by species and diameter class.....	41
26. Merchantable volume of all live trees and growing stock on commercial forest land, by ownership class and species group.....	32	38. Total volume of all live trees on commercial forest land, by species and diameter class.....	42
27. Volume of sawtimber on commercial forest land, by ownership class and species group.....	32	39. Green weight of forest biomass on commercial forest land, by species and diameter class.....	43
28. Net annual growth and removals of growing stock on commercial forest land, by ownership class and species group...	33	40. Net annual growth and removals of all live timber and growing stock on commercial forest land, by species.....	44
29. Net annual growth and removals of sawtimber on commercial forest land, by ownership class and species group.....	33	41. Net annual growth and removals of sawtimber on commercial forest land, by species.....	45
30. Volume of timber on commercial forest land, by class and species group	34	42. Annual removals of growing stock on commercial forest land, by species and diameter class.....	46
31. Number of all live trees on commercial forest land, by species and diameter class.....	35	43. Mortality of all live timber, growing stock, and sawtimber on commercial forest land, by species.....	47
32. Number of growing-stock trees on commercial forest land, by species and diameter class.....	36	44. Change in number of all live trees on commercial forest land, by species group, survey completion date, and diameter class.....	48
33. Merchantable volume of all live trees on commercial forest land, by species and diameter class.....	37	45. Land area, by class, major forest type, and survey completion date.....	49
34. Volume of growing stock on commercial forest land, by species and diameter class.....	38	46. Volume of sawtimber, growing stock, and all live timber on commercial forest land, by species group, survey completion date, and diameter class.....	50
35. Volume of sawtimber on commercial forest land, by species and diameter class.....	39		

Since 1974 in the Northern Coastal Plain of North Carolina

- area of commercial forest land decreased by 349,000 acres, or by 8 percent. Although 34,000 acres of new commercial forest were added, more than 382,000 acres were diverted to other land uses. Of the acreage diverted, 76 percent was to agriculture, 15 percent to urban and other nonforest uses and 9 percent to water or noncommercial forest land. Commercial forests now occupy almost 3.8 million acres, or 56 percent of the land area in the 23 counties making up the Northern Coastal Plain.

- area of commercial forest land held by nonindustrial private forest (NIPF) land-owners declined by almost 14 percent, from over 3.0 million acres to less than 2.6 million acres. Within the NIPF or other private sector, acreage of commercial forest land owned by farmers and other private individuals dropped, while that of corporations (other than forest industry) increased substantially. Commercial forest area in farm ownership decreased from 1.7 to 1.1 million acres, while that of private individuals decreased by 12 percent to 933,000 acres. Other corporations increased their holdings by 92 percent to 496,000 acres. The area of commercial forest in public ownership increased by 33 percent and now totals 238,000 acres. Acreage under forest industry control increased by 4 percent to 956,000 acres.

- acreage of commercial forest classified as a pine type declined by 162,000 acres, or by almost 10 percent. The acreage of pine type decreased 218,000 acres, or by 22 percent on NIPF land. Across all ownerships, area classified as pond pine type declined by 45 percent, from 529,000 to 290,000 acres, accounting for most of the net pine-type loss. Acreage of loblolly pine, the primary type in this region, increased by almost 8 percent to 1.1 million acres. Pine types now occupy nearly 1.5 million acres. Acreage of oak-pine type decreased from 607,000 to 481,000 acres, or by 21 percent. Acreage in hardwood types has changed little since 1974, remaining at 1.8 million acres.

- almost 65,000 acres annually were harvested and retained in commercial forest. The annual rate of harvest has increased by 12 percent on other private land, but declined by 5,000 acres annually, or by 19

percent on forest industry land. Across all ownerships, the annual rate of harvest has remained about the same. Pine stands account for nearly 50 percent of the area harvested each year. About 10,000 acres, or 16 percent of the area harvested annually, were oak-pine type and 22,000 acres, or 34 percent, were hardwood types. In addition to final harvests, partial cutting (including high grading, selective cutting, commercial thinning, and other stand improvement) occurred on 27,000 acres annually. On the average, substantial volumes of timber were removed from 92,000 acres each year. This average is 22 percent lower than the one for the 1963 to 1974 period.

- an average of 26,000 acres per year have been artificially regenerated and are adequately stocked with suitable trees. Across all ownership classes, the rate of planting averaged about 2,000 acres more per year than during the previous survey period. All of this increase was on NIPF and public land. The rate of planting dropped by 3,000 acres annually on forest industry land, a direct result of decreased rates of stand harvest. Still, almost three-fourths of all planting activity is on forest industry land. The rate of artificial regeneration has increased nearly fourfold on NIPF land, to 7,000 acres annually. Across all ownerships, an additional 27,000 acres per year were successfully regenerated through natural means. In total, 28,000 acres annually were regenerated to a pine forest type, about 87 percent of the acreage of pine type harvested each year.

- number of all live yellow pine trees on other private land declined substantially in all diameter classes from the 2-inch through the 16-inch class. The severity of this drop ranged from 29 percent in the 2-inch class to 14 percent in the 16-inch diameter class. Across all diameters, pines on other private land declined by 107 million stems, or by 25 percent. On forest industry land, large increases in number of pines were recorded in the 4- through 10-inch diameter classes, a result of developing pine plantations on this ownership. Number of pines in the 6- and 8-inch diameter classes more than doubled on forest industry land during the 10-year period. Across all ownerships, the number of all live pines declined through the 16-inch class, except in the 6- and 8-inch categories where industry gains compensated for losses on other private land.

Declines in number of hardwoods also occurred in the smaller sizes; drops ranged from 27 percent in the 2-inch class to 6 percent in the 10-inch diameter class.

- average basal area of all live trees 5.0 inches d.b.h. and larger has increased from 73 to 83 square feet per acre of commercial forest land. Increases in basal area have occurred across most major forest types. Average merchantable volume per acre also increased correspondingly, rising from 1,583 to 1,814 cubic feet per acre of commercial forest land. Hardwoods accounted for three-fourths of this increase.

- volume of softwood growing stock remained about the same and now totals 2.8 billion cubic feet. Softwood growing-stock volume increased by 34 percent to almost 631 million cubic feet on forest industry land and by 49 percent to 212 million cubic feet on public land. Together, these two ownerships almost offset an 11 percent loss on NIPF land. Volume of loblolly pine increased by 98 million cubic feet, or by 5 percent, while volume of pond pine decreased by 118 million cubic feet, or by 23 percent. Volume of softwood sawtimber decreased by 5 percent to almost 8.3 billion board feet on NIPF land and declined by 8 percent to 1.5 billion board feet on forest industry land. On public land, the board-foot volume of softwood sawtimber rose from 0.5 to 0.8 billion board feet.

- volume of hardwood growing stock increased by 9 percent, from 3.3 to 3.6 billion cubic feet. Increases occurred in the 12-inch and larger diameter classes, while volume in the 6- through 10-inch diameter classes declined by almost 60 million cubic feet. Increases in volume occurred in most hardwood species, but the largest was in soft maples, which increased by 138 million cubic feet, or by 36 percent. Increases in hardwood growing-stock volume were recorded for all three major ownership groups. The current inventory of hardwood growing stock includes almost 11 billion board feet of sawtimber, an increase of 19 percent.

In 1983

- net annual growth of all growing stock totaled 270 million cubic feet and included

almost 1.1 billion board feet of sawtimber.

Net annual growth of softwood growing stock totaled over 129 million cubic feet, an increase of 13 percent. On forest industry land, net annual growth of softwood growing stock increased by 104 percent to almost 47 million cubic feet, while on NIPF land, softwood net annual growth decreased by 12 percent to 75 million cubic feet per year. Net annual growth of hardwood growing stock totaled almost 141 million cubic feet, 21 percent more than in 1973. Increases in annual growth of hardwood occurred across all ownerships. More than 79 percent of the hardwood growth occurred on NIPF land, 16 percent on forest industry, and 5 percent on public land.

- annual removals of growing stock totaled 214 million cubic feet and included 836 million board feet of sawtimber. Softwood removals declined by 5 percent, from 137 to 129 million cubic feet since 1973. On forest industry land, softwood removals decreased from 54 to 31 million cubic feet, while on NIPF land, softwood removals increased by 20 percent to 96 million cubic feet per year. Pines provide a disproportionate share of the removals. They constitute 39 percent of the growing-stock inventory and 45 percent of the net growth, yet provide almost 58 percent of the removals. Removals of hardwood growing stock were down by 8 percent compared with the previous survey. Most of this decrease occurred on forest industry land where annual hardwood removals declined by 30 percent to 16 million cubic feet. Annual removals of hardwood growing stock remained at 67 million cubic feet on NIPF land.

- mortality of growing stock totaled 40 million cubic feet and included 105 million board feet of sawtimber. Mortality of softwood increased by 6 million cubic feet and reduced gross growth by 17 percent. Softwood mortality now totals almost 27 million cubic feet. Approximately 55 percent of the current mortality of softwood can be attributed to insects, 22 percent to suppression, 11 percent to diseases, and 12 percent to other natural agents. Across all ownerships, mortality of hardwood was down by 18 percent and totaled 13 million cubic feet. Mortality reduced the gross growth of hardwoods by 9 percent.

How the Inventory Is Made

The method of the inventory is a sampling procedure designed to provide reliable statistics primarily at the State and Survey Unit levels. Individual county statistics are presented so that any combination of counties may be added together until a total is large enough to meet the desired degree of reliability. Procedures were as follows:

1. Initial estimates of forest and nonforest areas were based on the classification of 21,909 sample clusters systematically spaced on the latest aerial photographs available. A subsample of 2,543 of the 16-point clusters was ground checked, and a linear regression was fitted to the data to develop the relationship between the photo and ground classification of the subsample. This procedure provides a means for adjusting the initial estimates of area for change in land use since date of photography and for photo misclassifications.

2. Estimates of timber volume and forest classifications were based on measurements recorded at 1,396 ground sample locations systematically distributed within the commercial forest land. The plot design at each location was based on a cluster of 10 points. In most cases, variable plots, using a basal-area factor of 37.5 square feet per acre, were systematically spaced within a single forest condition at 5 of the 10 cluster points. Trees less than 5 inches d.b.h. were tallied on a fixed-radius plot around each point center.

3. Equations prepared from detailed measurements collected on standing trees in this Unit, and similar measurements taken throughout the Southeast, were used to compute the volume of individual tally trees. A mirror caliper and sectional aluminum poles were used to obtain the additional measurements on these standing trees required to construct volume equations.

4. Felled trees were measured at 33 active cutting operations. These data will supplement the standing-tree volume data and be used to generate utilization factors for product and species groups. Forest biomass estimates were made using equations developed by the Utilization of Southern Timber Research Work Unit of the Southeastern Forest Experiment Station in Athens, Ga.

5. Estimates of growth, removals, and mortality were determined from the remeasurement of 1,467 permanent sample plots established in the fourth survey.

6. Ownership information was collected from correspondence, public records, and local contacts. In those counties where the sample missed a particular ownership class, temporary sample plots were added on these lands.

7. All field data were sent to Asheville for editing and were entered into disk and magnetic-tape storage for processing. Final estimates were based on statistical summaries of the data.

Reliability of the Data

Statistical analysis of these data indicates the following sampling errors in terms of one standard error (two times out of three):

Per million acres of	
commercial forest land	1.00
Per billion cubic feet of	
growing stock	5.96
Per billion cubic feet of	
net annual growth	1.12
Per billion cubic feet of	
annual removals	2.58

Sampling errors for county and unit totals,^a in terms of one standard error, Northern Coastal Plain of North Carolina, 1984

County	Commercial forest area	Cubic-foot volume of growing stock		
		Inventory	Growth	Removals
		Sampling error ^b		
Beaufort	2.10	7.29	7.07	17.71
Bertie	1.17	7.64	6.48	22.22
Camden	4.07	14.61	13.09	37.65
Carteret	2.25	11.50	10.99	25.80
Chowan	3.74	24.39	19.09	31.87
Craven	1.49	8.02	8.69	20.79
Currituck	4.34	14.03	14.00	55.49
Dare	4.68	10.55	8.87	47.76
Edgecombe	2.88	11.76	9.36	19.90
Gates	1.98	11.66	9.72	40.60
Halifax	1.39	8.73	7.42	21.69
Hertford	1.63	14.02	12.33	29.38
Hyde	3.05	11.39	10.69	23.23
Martin	1.74	9.87	9.13	25.00
Nash	1.87	10.28	9.00	24.45
Northampton	1.66	9.89	8.51	25.20
Pamlico	3.56	14.50	13.56	27.08
Pasquotank	6.43	21.89	18.97	27.55
Perquimans	3.65	15.40	12.00	32.33
Pitt	2.43	10.53	8.62	23.30
Tyrrell	3.01	10.99	10.87	26.30
Washington	3.84	16.04	16.53	30.19
Wilson	2.77	13.91	14.68	26.35
Total	0.52	2.35	2.14	5.58

^aSampling error of breakdowns of county and unit totals may be computed with the following formula:

$$E = \frac{(SE) \sqrt{(\text{specified volume or area})}}{\sqrt{(\text{volume or area total in question})}}$$

Where: E = Sampling error of the volume or area total in question.

SE = Specified sampling error in table.

^bBy random-sampling formula (in percent).

Definitions of Terms

All live trees. All trees 1.0 inch d.b.h. and larger which are not dead at the time of inventory.

All live-tree volume. Volume (cubic feet) of wood above the ground line in all live trees 1.0 inch d.b.h. and larger. The volume in twigs and lateral limbs smaller than 0.5 inch in diameter at the point of occurrence on sapling-size trees is included, but is excluded on poletimber and sawtimber-size trees.

Allowable cut. The volume of timber that could be cut on commercial forest land during a given period under specified management plans aimed at sustained production of timber products.

Basal area. The area in square feet of the cross section at breast height of a single tree or of all the trees in a stand, usually expressed as square feet of basal area per acre.

Biomass. The aboveground green weight of solid wood and bark in all live trees 1.0 inch d.b.h. and larger from the ground to the tip of the tree. All foliage is excluded. The weight of wood and bark in lateral limbs, secondary limbs, and twigs under 0.5 inch in diameter at the point of occurrence on sapling-size trees is included, but is excluded on poletimber and sawtimber-size trees.

Bole. That portion of a tree between a 1-foot stump and a 4-inch top diameter outside bark (d.o.b.) in trees 5.0 inches d.b.h. and larger.

Broad management class. A classification of commercial forest land based on forest type and stand origin.

Pine plantation. Stands that have been artificially regenerated by planting or direct seeding and with a southern yellow pine, white pine-hemlock, or other softwood forest type.

Natural pine. Stands that have not been artificially regenerated and with a

southern yellow pine, white pine-hemlock, or other softwood forest type.

Oak-pine. Stands with a forest type of oak-pine.

Upland hardwood. Stands with a forest type of oak-hickory, chestnut oak, southern scrub oak, or maple-beech-birch.

Lowland hardwood. Stands with a forest type of oak-gum-cypress, elm-ash-cottonwood, palm, or other tropical.

Bureau of Land Management lands. Federal lands administered by the Bureau of Land Management.

Census water. Streams, sloughs, estuaries, canals, and other moving bodies of water one-eighth of a statute mile in width and greater, and lakes, reservoirs, ponds, and other permanent bodies of water 40 acres in area and greater.

Commercial forest land. Land at least 16.7 percent stocked by forest trees of any size, or formerly having had such tree cover, not currently developed for nonforest use, capable of producing 20 cubic feet of industrial wood per acre per year and not withdrawn from timber utilization by legislative action.

Commercial species. Tree species conventionally regarded as being able to develop into trees suitable for the manufacture of industrial timber products. Species that typically exhibit small size, poor form, or inferior quality are excluded.

Cropland. Land under cultivation within the past 24 months, including orchards and land in soil-improving crops, but excluding land cultivated in developing improved pasture. Also includes idle farmland.

D.b.h. Tree diameter (outside bark) at breast height (4.5 feet above the ground).

Diameter class. A classification of trees based on tree d.b.h. Two-inch diameter classes are commonly used by Forest Inventory and Analysis, with the even inch as the

approximate midpoint for a class. For example, the 6-inch class includes trees 5.0 through 6.9 inches d.b.h., inclusive.

Farm. Land on which agricultural operations are being conducted and sale of agricultural products totaled \$1,000 or more during the year.

Farm operator. A person who operates a farm, either doing the work himself or directly supervising the work.

Farmer-owned land (see: Other private land).

Forest industry land. Land owned by companies or individuals operating wood-using plants.

Forest industry leased land. Land which are leased or under management contracts to forest industry from other owners for periods of one forest rotation or longer. Land under cutting contracts are not included.

Forest land. Land at least 16.7 percent stocked by forest trees of any size, or formerly having had such tree cover, and not currently developed for nonforest use.

Forest type. A classification of forest land based on the species forming a plurality of live-tree stocking.

White pine-hemlock. Forests in which eastern white pine, red pine, or jack pine, singly or in combination, constitute a plurality of the stocking. (Common associates include hemlock, birch, and maple.)

Spruce-fir. Forests in which spruce or true firs, singly or in combination, constitute a plurality of the stocking. (Common associates include maple, birch, and hemlock.)

Longleaf-slash pine. Forests in which longleaf or slash pine, singly or in combination, constitute a plurality of the stocking. (Common associates include oak, hickory, and gum.)

Loblolly-shortleaf pine. Forests in which loblolly pine, shortleaf pine, or other southern yellow pines, except longleaf or slash pine, singly or in combination, con-

stitute a plurality of the stocking. (Common associates include oak, hickory, and gum.)

Oak-pine. Forests in which hardwoods (usually upland oaks) constitute a plurality of the stocking but in which pines account for 25 to 50 percent of the stocking. (Common associates include gum, hickory, and yellow-poplar.)

Oak-hickory. Forests in which upland oaks or hickory, singly or in combination, constitute a plurality of the stocking, except where pines account for 25 to 50 percent, in which case the stand would be classified oak-pine. (Common associates include yellow-poplar, elm, maple, and black walnut.)

Oak-gum-cypress. Bottom-land forests in which tupelo, blackgum, sweetgum, oaks, or southern cypress, singly or in combination, constitute a plurality of the stocking, except where pines account for 25 to 50 percent, in which case the stand would be classified oak-pine. (Common associates include cottonwood, willow, ash, elm, hackberry, and maple.)

Elm-ash-cottonwood. Forests in which elm, ash, or cottonwood, singly or in combination, constitute a plurality of the stocking. (Common associates include willow, sycamore, beech, and maple.)

Maple-beech-birch. Forests in which maple, beech, or yellow birch, singly or in combination, constitute a plurality of the stocking. (Common associates include hemlock, elm, basswood, and white pine.)

Palm, other tropical. Forests in which palms and other tropicals constitute a plurality of the stocking.

Gross growth. Annual increase in merchantable volume of trees in the absence of cutting and mortality. (Gross growth includes survivor growth, ingrowth, growth on ingrowth, growth on removals prior to removal, and growth on mortality prior to death.)

Growing-stock trees. Live sawtimber-size trees of commercial species containing at least a 12-foot log, or two noncontiguous

saw logs each 8 feet or longer, meeting minimum grade requirements (hardwoods must qualify as either a log grade of 3 or 4; softwoods must qualify as a log grade 3) with at least one-third of the gross board-foot volume (International 1/4-inch rule) between a 1-foot stump and the minimum saw-log top being sound, or a live tree below sawtimber size that will prospectively qualify under the above standards.

Desirable tree. A tree that qualifies as growing stock and has no serious defects in quality limiting present or prospective use; is of relatively high vigor (30 percent or more live crown ratio); is compatible with the site and physiographic class; has a total board-foot loss not to exceed 15 percent in softwoods or 25 percent in hardwoods as a result of severe sweep, crook, or lean; and has a relatively clear bole.

Acceptable tree. A tree that qualifies as growing stock but does not meet the minimum requirements to qualify as a desirable tree. Included are sawtimber-size trees that do not contain a 12-foot saw log because of excessive, natural taper in the butt log, but have the potential to produce a 12-foot saw log as diameter increases.

Growing-stock volume. Volume (cubic feet) of solid wood in growing-stock trees 5.0 inches d.b.h. and larger, from a 1-foot stump to a minimum 4.0-inch top diameter, outside bark, on the central stem. Volume of solid wood in primary forks from the point of occurrence to a minimum 4.0-inch top diameter outside bark is included.

Hardwoods. Angiosperms; dicotyledonous trees (including all palm species which are monocotyledonous), usually broadleaf and deciduous.

Soft hardwoods. Soft-textured hardwoods such as boxelder, red and silver maples, hackberry, loblolly-bay, sweetgum, yellow-poplar, magnolia, sweetbay, water tupelo, blackgum, sycamore, cottonwood, black cherry, willow, basswood, and elm.

Hard hardwoods. Hard-textured hardwoods such as sugar maple, birch, hickory, dog-

wood, persimmon (forest grown), black locust, beech, ash, honeylocust, holly, black walnut, mulberry, and all commercial oaks.

Idle farmland. Land including former cropland, orchard, improved pasture, and farm sites not tended within the past 2 years, and currently less than 16.7 percent stocked with live trees.

Improved pasture. Land currently improved for grazing by cultivation, seeding, irrigation, or clearing of trees or brush.

Indian land. All lands held in trust by the United States for individual Indians or tribes, or all lands, titles to which are held by individual Indians or tribes, subject to Federal restrictions against alienation.

Industrial wood. All roundwood products except fuelwood.

Ingrowth. The number or net volume of trees that grow large enough during a specified year to qualify as saplings, poletimber, or sawtimber.

Inhibiting vegetation. Cover sufficiently dense to prevent the establishment of tree seedlings.

Land area. The area of dry land and land temporarily or partly covered by water such as marshes, swamps, and river flood plains (omitting tidal flats below mean high tide), streams, sloughs, estuaries, and canals less than one-eighth of a statute mile in width, and lakes, reservoirs, and ponds less than 40 acres in area.

Log grade. A classification of logs based on external characteristics as indicators of quality or value.

Logging residues. The unused merchantable portion of growing-stock trees cut or destroyed during logging operations.

Logging slash. The unmerchantable portion of growing-stock trees (including saplings) plus all cull trees 1.0 inch d.b.h. and larger cut or destroyed during logging operations and not used.

Manageable stand. Commercial forest land at least 60 percent stocked with growing-stock trees that can be featured together under a management scheme.

Merchantable portion. That portion of all live trees 5.0 inches d.b.h. and larger between a 1-foot stump and a minimum 4.0-inch top diameter outside bark on the central stem. That portion of primary forks from the point of occurrence to a minimum 4.0-inch top diameter outside bark is included.

Merchantable volume. Solid-wood volume in merchantable portion of all live trees.

Miscellaneous Federal land. Federal land other than National Forests, land administered by the Bureau of Land Management, and land administered by the Bureau of Indian Affairs.

Miscellaneous private land (see: Other private land).

Mortality. The merchantable volume in trees that have died from natural causes during a specified period.

National Forest land. Federal land that has been legally designated as National Forests or purchase units, and other land under the administration of the Forest Service, including experimental areas and Bankhead-Jones Title III land.

Net annual growth. The net change in merchantable volume for a specific year in the absence of cutting (gross growth minus mortality for that specified year.)

Net volume. Gross volume of wood less deductions for rot, sweep, or other defect affecting use for timber products.

Noncommercial forest land. Forest land not considered commercial. Includes both unproductive forest land and productive-reserved forest land.

Noncommercial species. Tree species of typically small size, poor form, or inferior quality which normally do not develop into trees suitable for industrial wood products.

Nonforest land. Land that has never supported forests and land formerly forested where timber production is precluded by development for other uses.

Nonindustrial private forest (NIPF) land (see: Other private land).

Nonstocked forest land. Commercial forest land less than 16.7 percent stocked with growing-stock trees.

Other private land. Privately owned land excluding forest industry land or forest industry leased land. Also referred to as nonindustrial private forest (NIPF) land.

Farmer-owned land. Owned by farm operators excluding incorporated farm owner-ships.

Other individual land. Owned by individuals other than farm operators.

Other corporate land. Owned by corporations, including incorporated farm owner-ships.

Other removals. The growing-stock volume of trees removed from the inventory by cultural operations such as timber stand improvement, land clearing, and other changes in land use that result in the removal of the trees from the commercial forest.

Plant residues. Wood material generated in the production of timber products at primary manufacturing plants.

Coarse residues. Material, such as slabs, edgings, trim, veneer cores and ends, which is suitable for chipping.

Fine residues. Material, such as sawdust, shavings, and veneer chippings, which is not suitable for chipping.

Plant byproducts. Residues (coarse or fine) utilized in the further manufacture of industrial products or for consumer use, or utilized as fuel.

Unused plant residues. Residues (coarse or fine) that are not used for any product, including fuel.

Poletimber-size trees. All live trees at least 5.0 inches d.b.h. but smaller than sawtimber size.

Productive-reserved forest land. Forest land sufficiently productive to qualify as commercial forest land, but withdrawn from timber utilization through statute or administrative designation.

Quality class. A classification of sawtimber volume by log or tree grades.

Rangeland. Land on which the natural vegetation is predominantly native grasses, grasslike plants, forbs, or shrubs valuable for forage, not qualifying as commercial forest and not developed for another land use. Rangeland includes natural grassland and savannah.

Rotten trees. Live trees of commercial species that do not contain at least one 12-foot saw log, or two noncontiguous saw logs, each 8 feet or longer, now or prospectively, primarily because of rot or missing sections, and with less than one-third of the gross board-foot tree volume in sound material.

Rough trees. Live trees of commercial species that do not contain at least one 12-foot saw log, or two noncontiguous saw logs, each 8 feet or longer, now or prospectively, primarily because of roughness, poor form, splits, and cracks, and with less than one-third of the gross board-foot tree volume in sound material; and all live trees of noncommercial species.

Roundwood (roundwood logs). Logs, bolts, or other round sections cut from trees for industrial or consumer uses.

Roundwood chipped. Any timber cut primarily for pulpwood, delivered to nonpulpmills, chipped, and then sold to pulpmills as residues, including chipped tops, jump sections, whole trees and pulpwood sticks.

Roundwood products. Any primary product such as lumber, poles, pilings, pulp, or fuelwood which is produced from roundwood.

Salvable dead trees. Standing or down dead trees considered utilizable by Forest Inventory and Analysis standards.

Saplings. Live trees 1.0 to 5.0 inches d.b.h.

Saw log. A log meeting minimum standards of diameter, length, and defect, including logs at least 8 feet long, sound and straight, and with a minimum diameter inside bark for softwoods of 6 inches (8 inches for hardwoods).

Saw-log portion. That part of the bole of sawtimber trees between a 1-foot stump and the saw-log top, including the portion of forks large enough to contain a saw log.

Saw-log top. The point on the bole of sawtimber trees above which a conventional saw log cannot be produced. The minimum saw-log top is 7.0 inches in diameter outside bark (d.o.b.) for softwoods and 9.0 inches (d.o.b.) for hardwoods.

Sawtimber-size trees. Softwoods 9.0 inches d.b.h. and larger and hardwoods 11.0 inches d.b.h. and larger.

Sawtimber volume. Growing-stock volume in the saw-log portion of sawtimber-size trees in board feet (International 1/4-inch rule).

Seedlings. Live trees of commercial species less than 1.0 inch d.b.h. that are expected to survive and develop.

Site class. A classification of forest land in terms of inherent capacity to grow crops of industrial wood based on fully stocked natural stands, by annual production capacity.

Class 1. 165 or more cubic feet per acre.

Class 2. 120 to 164 cubic feet per acre.

Class 3. 85 to 119 cubic feet per acre.

Class 4. 50 to 84 cubic feet per acre.

Class 5. 20 to 49 cubic feet per acre.

Softwoods. Gymnosperms; in the order Coniferales, usually evergreen (includes the genus Taxodium which is deciduous), having needles or scalelike leaves.

Pines. Yellow pine species which include loblolly, longleaf, slash, pond, shortleaf, pitch, Virginia, sand, spruce, and Table Mountain pines.

Other softwoods. Cypress, eastern redcedar, white cedar, eastern white pine, eastern hemlock, spruce, and fir.

Stand-size class. A classification of forest land based on the diameter class distribution of growing-stock trees in the stand.

Sawtimber stands. Stands at least 16.7 percent stocked with growing-stock trees, with half or more of total stocking in sawtimber and poletimber trees, and with sawtimber stocking at least equal to poletimber stocking.

Poletimber stands. Stands at least 16.7 percent stocked with growing-stock trees of which half or more of total stocking is in poletimber and sawtimber trees, and with poletimber stocking exceeding that of sawtimber.

Sapling-seedling stands. Stands at least 16.7 percent stocked with growing-stock trees of which more than half of total stocking is saplings and seedlings.

State, county, and municipal land. Land owned by States, counties, and local public agencies or municipalities, or land leased to these governmental units for 50 years or more.

Stocking. The degree of occupancy of land by trees, measured by basal area or the number of trees in a stand and spacing in the stand, compared with a minimum standard, depending on tree size, required to fully utilize the growth potential of the land.

Fully stocked. 100 percent or more stocking.

Medium stocked. 60 to 99 percent stocking.

Poorly stocked. Less than 60 percent stocking.

Survivor growth. The merchantable volume increment on trees 5.0 inches d.b.h. and larger in the inventory at the beginning of the year and surviving to its end.

Timber products. Roundwood products and byproducts.

Timber removals. The merchantable volume of trees removed from the inventory by harvesting, cultural operations such as stand improvement, land clearing, or changes in land use.

Top. The portion of the main stem and forks from a 4.0-inch diameter outside bark to the tips of the main stem and forks, plus all other limbs above the 4.0-inch top at least 0.5 inch in diameter at their point of occurrence.

Treatment opportunity. A classification of the management or treatment that would most improve for timber production the existing condition of the stand being sampled.

Unproductive forest land. Forest land incapable of producing 20 cubic feet per acre of industrial wood under natural conditions, because of adverse site conditions.

Upper-stem portion. That part of the main stem or fork of sawtimber trees above the saw-log top to minimum top diameter 4.0 inches outside bark or to the point where the main stem or fork breaks into limbs.

Urban and other areas. Areas developed for residential, industrial, or recreational purposes, school yards, cemeteries, roads, railroads, airports, beaches, powerlines and other rights-of-way, or other nonforest land not included in any other specified land use class.

Stocking standard

D.b.h. class	Minimum number of trees per acre for full stocking	Minimum basal area per acre for full stocking
Seedlings	600	--
2	560	--
4	460	--
6	340	67
8	240	84
10	155	85
12	115	90
14	90	96
16	72	101
18	60	106
20	51	111

Conversion Factors

Cubic feet of wood per average cord (excluding bark)

D.b.h. class	All species	Pine	Other softwood	Hardwood
6	60.5	61.0	68.2	60.0
8	68.5	68.1	76.0	68.4
10	73.4	73.1	81.4	73.4
12	76.7	76.7	85.2	76.4
14	79.1	79.4	88.2	78.4
16	80.8	81.6	90.4	79.8
18	82.2	83.3	92.3	80.8
20	83.2	84.8	93.8	81.5
22	84.1	86.0	95.1	82.1
24+	85.3	87.6	98.0	83.2
Average	75.3	75.0	88.3	74.9

Metric equivalents of units used in this report

1 acre = 4,046.86 square meters or 0.404686 hectares
1 cubic foot = 0.028317 cubic meters
1 inch = 2.54 centimeters or 0.0254 meters
Breast height = 1.4 meters above ground level
1 square foot = 929.03 square centimeters or 0.0929 square meters
1 square foot per acre basal area = 0.229568 square meters per hectare
1 pound = 0.454 kilograms
1 ton = 0.907 metric tons

County Tables

The county tables are intended for use in compiling forest resource estimates for groups of counties. Because the sampling procedure used by the Forest Survey was intended primarily to furnish inventory data for the Survey Unit as a whole, individual county estimates have limited and variable accuracy. As county totals are broken down by various subdivisions, the possibility of error increases and is greatest for the smallest items. The order of this increase can be computed with the formula on page 4.

Table 1.--Area, by county and land class, Northern Coastal Plain of North Carolina, 1984

County	All land ^a	Forest land				Nonforest land ^b
		Total	Commercial forest	Unproductive forest	Productive- reserved	
----- Acres -----						
Beaufort	528,704	301,822	301,822	--	--	226,882
Bertie	448,595	318,227	318,227	--	--	130,368
Camden	153,914	92,016	77,531	--	14,485	61,898
Carteret	336,365	192,836	187,888	4,858	90	143,529
Chowan	116,192	52,326	52,326	--	--	63,866
Craven	448,941	317,305	316,989	--	316	131,636
Currituck	163,578	67,774	66,469	1,305	--	95,804
Dare	250,106	166,905	147,165	18,635	1,105	83,201
Edgecombe	323,642	158,528	158,528	--	--	165,114
Gates	216,480	154,927	145,523	--	9,404	61,553
Halifax	463,162	259,292	256,952	--	2,340	203,870
Hertford	227,898	149,132	149,132	--	--	78,766
Hyde	399,501	222,582	221,910	672	--	176,919
Martin	294,886	183,261	183,261	--	--	111,625
Nash	345,344	177,326	177,326	--	--	168,018
Northampton	344,525	203,939	203,939	--	--	140,586
Pamlico	218,067	121,704	120,348	1,356	--	96,363
Pasquotank	145,920	52,259	52,259	--	--	93,661
Perquimans	157,696	74,582	74,582	--	--	83,114
Pitt	420,173	195,439	195,439	--	--	224,734
Tyrrell	260,365	159,230	159,053	--	177	101,135
Washington	212,243	98,486	93,590	4,741	155	113,757
Wilson	239,533	101,078	101,078	--	--	138,455
Total	6,715,830	3,820,976	3,761,337	31,567	28,072	2,894,854

^aFrom U.S. Bureau of the Census, 1980.

^bIncludes 53,921 acres of water according to Forest Survey standards of area classification, but defined by the Bureau of Census as land.

Table 2.--Area of commercial forest land, by county and ownership class, Northern Coastal Plain of North Carolina, 1984

County	All ownerships	Ownership class							
		National Forest	Miscellaneous Federal	State	County and municipal	Forest industry ^a	Other private		
							Farmer	Corporate	Individual
----- Acres -----									
Beaufort	301,822	--	--	4,367	58	168,415	47,848	24,964	56,170
Bertie	318,227	--	--	65	90	108,374	109,042	50,328	50,328
Camden	77,531	--	9,203	--	--	20,099	25,163	4,194	18,872
Carteret	187,888	55,937	5,535	411	121	52,448	3,865	23,190	46,381
Chowan	52,326	--	20	--	200	10,808	23,230	5,162	12,906
Craven	316,989	55,879	5,170	105	255	115,236	60,603	--	79,741
Currituck	66,469	--	1,694	8,553	190	7,364	19,467	--	29,201
Dare	147,165	--	40,656	--	10	550	--	98,381	7,568
Edgecombe	158,528	--	--	175	221	7,391	85,325	14,221	51,195
Gates	145,523	--	11,528	3,800	--	50,322	43,567	--	36,306
Halifax	256,952	--	27	857	225	47,284	124,627	12,717	71,215
Hertford	149,132	--	--	165	130	38,784	66,031	5,503	38,519
Hyde	221,910	--	8,628	12,850	--	34,113	26,730	92,069	47,520
Martin	183,261	--	--	--	40	62,313	98,925	--	21,983
Nash	177,326	--	--	93	87	7,341	75,469	12,578	81,758
Northampton	203,939	--	--	1,233	292	27,639	106,011	11,461	57,303
Pamlico	120,348	--	--	1,000	41	52,748	18,719	14,560	33,280
Pasquotank	52,259	--	3,831	217	365	5,860	25,192	8,397	8,397
Perquimans	74,582	--	600	--	61	20,996	27,613	6,903	18,409
Pitt	195,439	--	--	20	683	29,942	79,651	10,986	74,157
Tyrrell	159,053	--	--	27	9	45,761	13,868	90,143	9,245
Washington	93,590	--	1,000	361	4	40,284	20,777	7,791	23,373
Wilson	101,078	--	--	4	1,011	2,123	36,378	2,798	58,764
Total	3,761,337	111,816	87,892	34,303	4,093	956,195	1,138,101	496,346	932,591

^aIncludes 32,458 acres of other private land under long-term lease.

Table 3.--Area of commercial forest land, by county and forest-type group, Northern Coastal Plain of North Carolina, 1984

County	All type groups	Forest-type group								
		White pine-hemlock	Spruce-fir	Longleaf-slash	Loblolly-shortleaf	Oak-pine	Oak-hickory	Oak-gum-cypress	Elm-ash-cottonwood	Maple-beech-birch
----- Acres -----										
Beaufort	301,822	--	--	3,381	171,853	31,207	41,949	53,432	--	--
Bertie	318,227	--	--	--	103,899	44,093	80,120	75,010	15,105	--
Camden	77,531	--	--	--	6,290	2,097	12,582	56,562	--	--
Carteret	187,888	--	--	20,771	94,204	34,747	12,777	25,389	--	--
Chowan	52,326	--	--	--	13,368	20,770	13,026	5,162	--	--
Craven	316,989	--	--	7,504	135,491	55,220	45,117	57,968	15,689	--
Currituck	66,469	--	--	--	18,837	11,445	12,977	23,210	--	--
Dare	147,165	--	--	--	56,017	22,703	--	68,445	--	--
Edgecombe	158,528	--	--	--	38,677	19,909	48,572	48,526	2,844	--
Gates	145,523	--	--	--	52,954	9,659	24,155	58,755	--	--
Halifax	256,952	--	--	--	86,170	35,609	90,378	39,708	5,087	--
Hertford	149,132	--	--	--	54,131	18,629	48,858	27,514	--	--
Hyde	221,910	--	--	--	124,541	27,373	14,367	53,903	1,726	--
Martin	183,261	--	--	2,813	61,168	27,610	30,759	55,350	5,561	--
Nash	177,326	--	--	--	58,881	26,203	73,373	15,724	3,145	--
Northampton	203,939	--	--	--	56,971	23,304	70,427	31,609	21,628	--
Pamlico	120,348	--	--	2,080	63,251	4,160	12,480	36,297	2,080	--
Pasquotank	52,259	--	--	--	16,850	--	11,328	24,081	--	--
Perquimans	74,582	--	--	--	25,501	9,204	23,770	16,107	--	--
Pitt	195,439	--	--	--	78,525	19,227	38,450	59,237	--	--
Tyrrell	159,053	--	--	--	65,440	20,414	--	73,199	--	--
Washington	93,590	--	--	--	20,413	14,901	9,933	48,343	--	--
Wilson	101,078	--	--	--	30,106	2,799	39,179	26,196	2,798	--
Total	3,761,337	--	--	36,549	1,433,538	481,283	754,577	979,727	75,663	--

Table 4.--Area of commercial forest land, by county and stand-size class, Northern Coastal Plain of North Carolina, 1984

County	All stands	Stand-size class			Nonstocked areas
		Sawtimber	Poletimber	Sapling- seedling	
----- Acres -----					
Beaufort	301,822	99,672	123,018	70,678	8,454
Bertie	318,227	174,790	68,099	72,959	2,379
Camden	77,531	40,657	10,485	24,292	2,097
Carteret	187,888	82,599	51,345	53,944	--
Chowan	52,326	20,890	10,445	18,289	2,702
Craven	316,989	124,319	82,793	106,688	3,189
Currituck	66,469	39,724	15,299	11,446	--
Dare	147,165	46,464	76,181	19,475	5,045
Edgecombe	158,528	62,747	57,735	38,046	--
Gates	145,523	56,954	49,112	37,060	2,397
Halifax	256,952	134,503	62,160	60,289	--
Hertford	149,132	63,447	40,044	45,641	--
Hyde	221,910	76,702	69,276	52,655	23,277
Martin	183,261	99,641	36,050	44,291	3,279
Nash	177,326	105,865	33,724	37,737	--
Northampton	203,939	110,388	52,777	37,909	2,865
Pamlico	120,348	58,048	21,384	32,596	8,320
Pasquotank	52,259	40,770	6,332	5,157	--
Perquimans	74,582	24,309	31,166	13,807	5,300
Pitt	195,439	102,476	45,025	45,192	2,746
Tyrrell	159,053	72,781	42,165	37,172	6,935
Washington	93,590	37,820	20,457	29,575	5,738
Wilson	101,078	48,586	30,105	19,589	2,798
Total	3,761,337	1,724,152	1,035,177	914,487	87,521

Table 5.--Area of commercial forest land, by county and site class, Northern Coastal Plain of North Carolina, 1984

County	All classes	Site class (cubic feet per acre per year)				
		> 164	120-164	85-119	50-84	20-49
----- Acres -----						
Beaufort	301,822	--	4,161	126,807	155,184	15,670
Bertie	318,227	--	11,184	152,975	148,476	5,592
Camden	77,531	--	2,097	20,969	54,465	--
Carteret	187,888	--	--	32,064	91,476	64,348
Chowan	52,326	--	5,162	39,421	5,162	2,581
Craven	316,989	--	14,429	94,185	153,747	54,628
Currituck	66,469	--	--	29,200	28,412	8,857
Dare	147,165	--	--	10,693	77,943	58,529
Edgecombe	158,528	--	25,599	55,065	77,864	--
Gates	145,523	--	4,841	50,732	81,790	8,160
Halifax	256,952	5,087	12,716	99,865	128,663	10,621
Hertford	149,132	--	2,751	48,265	98,116	--
Hyde	221,910	--	5,940	24,604	97,084	94,282
Martin	183,261	--	13,740	57,837	111,684	--
Mecklenburg	177,326	--	15,721	88,140	73,465	--
Northampton	203,939	--	8,688	78,963	110,558	5,730
Pamlico	120,348	--	6,011	32,367	54,386	27,584
Pasquotank	52,259	--	8,762	32,967	10,530	--
Perquimans	74,582	--	9,902	31,971	30,408	2,301
Pitt	195,439	--	16,480	86,539	92,420	--
Tyrrell	159,053	--	--	33,490	79,733	45,830
Washington	93,590	--	2,597	35,130	44,475	11,388
Wilson	101,078	--	5,596	40,193	55,289	--
Total	3,761,337	5,087	176,377	1,302,442	1,861,330	416,101

Table 6.--Area of commercial forest land, by county and stocking class of growing-stock trees, Northern Coastal Plain of North Carolina, 1984

County	All classes	Stocking percentage ^a				
		> 130	100-130	60-99	16.7-59	< 16.7
----- Acres -----						
Beaufort	301,822	43,760	124,387	106,307	18,914	8,454
Bertie	318,227	26,288	164,328	100,904	24,328	2,379
Camden	77,531	2,097	31,453	35,186	6,698	2,097
Carteret	187,888	10,216	92,081	43,659	41,932	--
Chowan	52,326	2,581	26,274	20,769	--	2,702
Craven	316,989	21,939	133,875	128,677	29,309	3,189
Currituck	66,469	--	34,958	21,616	9,895	--
Dare	147,165	10,695	66,648	45,908	18,869	5,045
Edgecombe	158,528	8,532	78,495	60,125	11,376	--
Gates	145,523	19,290	70,846	48,172	4,818	2,397
Halifax	256,952	28,862	124,765	87,838	15,487	--
Hertford	149,132	8,254	78,097	38,649	24,132	--
Hyde	221,910	28,336	63,856	77,061	29,380	23,277
Martin	183,261	25,058	99,771	52,340	2,813	3,279
Nash	177,326	31,445	73,551	48,219	24,111	--
Northampton	203,939	11,187	87,618	90,809	11,460	2,865
Pamlico	120,348	25,937	20,900	54,791	10,400	8,320
Pasquotank	52,259	4,780	19,413	18,711	9,355	--
Perquimans	74,582	5,900	24,202	36,879	2,301	5,300
Pitt	195,439	15,376	92,724	81,847	2,746	2,746
Tyrrell	159,053	18,490	38,111	63,530	31,987	6,935
Washington	93,590	4,967	27,663	32,757	22,465	5,738
Wilson	101,078	5,600	38,500	42,986	11,194	2,798
Total	3,761,337	359,590	1,612,516	1,337,740	363,970	87,521

^aSee stocking standards on page 11.

Table 7.--Volume of sawtimber and growing stock on commercial forest land, by county and species group, Northern Coastal Plain of North Carolina, 1984

County	Sawtimber					Growing stock				
	All species	Pine	Other softwood	Soft hardwood	Hard hardwood	All species	Pine	Other softwood	Soft hardwood	Hard hardwood
	Thousand board feet					Thousand cubic feet ^a				
Beaufort	1,238,454	583,901	47,709	401,605	205,239	448,054	220,753	10,700	152,355	64,246
Bertie	2,030,788	698,846	115,371	816,687	399,884	582,838	182,684	24,793	248,275	127,086
Camden	573,711	164,316	27,567	322,950	58,878	164,177	32,603	7,184	105,944	18,446
Carteret	773,531	630,049	--	112,969	30,513	232,952	166,788	--	53,053	13,111
Chowan	342,085	162,152	6,325	137,161	36,447	84,176	31,230	1,294	40,765	10,887
Craven	1,529,798	803,588	38,145	506,282	181,783	462,110	234,350	8,147	167,401	52,212
Currituck	498,187	303,002	26,171	136,319	32,695	136,264	61,074	6,144	57,026	12,020
Dare	615,603	303,563	102,214	194,829	14,997	220,070	92,033	25,484	99,046	3,507
Edgecombe	1,081,286	364,007	56,309	407,900	253,070	303,351	84,612	11,204	123,979	83,556
Gates	887,196	418,557	68,702	340,873	59,064	277,641	102,090	15,594	132,568	27,389
Halifax	1,871,493	793,969	25,816	663,275	388,433	503,515	184,642	4,494	191,467	122,912
Hertford	797,948	281,043	36,875	306,893	173,137	227,749	67,254	7,775	99,141	53,579
Hyde	892,371	574,215	46,197	222,738	49,221	294,262	176,781	10,684	95,657	11,140
Martin	1,252,556	466,643	111,504	561,480	112,929	372,609	121,698	22,602	189,640	38,669
Nash	1,354,865	678,906	19,144	378,648	278,167	349,094	149,445	4,033	113,651	81,965
Northampton	1,218,034	391,246	37,605	400,659	388,524	342,561	103,498	8,027	122,106	108,930
Pamlico	655,933	432,569	14,803	176,430	32,131	194,421	111,248	2,902	68,433	11,838
Pasquotank	478,144	156,460	26,348	251,199	44,137	127,791	31,963	6,686	78,919	10,223
Perquimans	283,766	53,253	20,147	116,996	93,370	109,967	27,301	4,907	49,337	28,422
Pitt	1,278,581	454,692	122,182	548,499	153,208	361,155	128,151	23,333	159,431	50,240
Tyrrell	762,335	419,834	65,247	249,103	28,151	260,687	110,496	27,288	114,348	8,555
Washington	412,676	123,759	41,427	200,785	46,705	133,905	27,281	11,641	77,552	17,431
Wilson	701,109	290,106	9,941	252,754	148,308	191,839	63,129	2,091	71,676	54,943
Total	21,530,450	9,548,676	1,065,749	7,707,034	3,208,991	6,381,188	2,511,104	247,007	2,611,770	1,011,307

^aFactors for converting to cords are shown on page 11.

Table 8.--Net annual growth of sawtimber and growing stock on commercial forest land, by county and species group, Northern Coastal Plain of North Carolina, 1983

County	Sawtimber					Growing stock				
	All species	Pine	Other softwood	Soft hardwood	Hard hardwood	All species	Pine	Other softwood	Soft hardwood	Hard hardwood
	Thousand board feet					Thousand cubic feet				
Beaufort	86,265	52,836	1,617	21,117	10,695	24,732	15,270	268	6,637	2,557
Bertie	98,977	38,084	3,356	35,189	22,348	24,757	9,676	640	9,312	5,129
Camden	23,618	6,497	823	13,564	2,734	5,467	1,020	180	3,605	662
Carteret	43,028	35,048	--	6,206	1,774	9,369	6,440	--	2,291	638
Chowan	15,774	5,054	95	7,060	3,565	3,208	1,023	16	1,731	438
Craven	74,436	41,206	1,227	25,802	6,201	21,468	12,979	184	6,389	1,916
Currituck	20,003	9,534	610	7,108	2,751	4,916	1,583	225	2,509	599
Dare	34,876	20,365	5,191	8,896	424	7,259	3,244	891	3,052	72
Edgecombe	54,324	16,261	1,741	22,389	13,933	12,217	4,238	283	4,455	3,241
Gates	44,531	18,834	2,391	19,342	3,964	11,462	5,031	433	4,681	1,317
Halifax	95,184	41,030	390	34,283	19,481	22,065	8,376	69	8,332	5,288
Hertford	34,071	12,013	1,127	13,400	7,531	9,281	3,415	199	3,744	1,923
Hyde	50,312	33,285	1,533	13,228	2,266	12,573	7,676	248	4,263	386
Martin	62,898	25,186	3,346	26,835	7,531	15,652	6,417	928	6,686	1,621
Nash	57,322	26,636	405	16,326	13,955	14,106	6,143	68	4,804	3,091
Northampton	56,630	22,718	871	16,854	16,187	14,584	5,889	136	4,391	4,168
Pamlico	36,362	25,608	460	8,988	1,306	8,639	4,799	74	3,339	427
Pasquotank	18,703	6,208	1,006	9,435	2,054	3,973	1,189	186	2,260	338
Perquimans	14,533	4,691	624	5,778	3,440	5,033	2,294	121	1,546	1,072
Pitt	60,528	23,236	3,485	26,214	7,593	15,432	7,578	560	5,189	2,105
Tyrrell	37,522	21,406	3,079	11,793	1,244	9,743	4,238	931	4,246	328
Washington	16,646	5,272	1,515	8,157	1,702	5,935	1,079	533	3,539	784
Wilson	39,190	12,614	331	16,604	9,641	8,235	2,651	55	3,403	2,126
Total	1,075,733	503,622	35,223	374,568	162,320	270,106	122,248	7,228	100,404	40,226

Table 9.--Annual removals of sawtimber and growing stock on commercial forest land, by county and species group, Northern Coastal Plain of North Carolina, 1983

County	Sawtimber					Growing stock				
	All species	Pine	Other softwood	Soft hardwood	Hard hardwood	All species	Pine	Other softwood	Soft hardwood	Hard hardwood
	----- Thousand board feet -----					----- Thousand cubic feet -----				
Beaufort	65,230	45,685	1,178	11,169	7,198	15,778	10,551	220	3,460	1,547
Bertie	55,663	38,794	688	7,989	8,192	14,313	8,488	142	3,183	2,500
Camden	33,187	24,122	5,126	2,014	1,925	7,313	4,370	1,092	1,343	508
Carteret	27,512	26,451	--	1,061	--	9,051	8,177	--	821	53
Chowan	21,801	16,107	--	2,632	3,062	4,880	3,014	--	858	1,008
Craven	46,478	36,771	--	8,630	1,077	11,873	8,702	--	2,619	552
Currituck	13,614	6,963	--	6,651	--	3,680	1,812	--	1,868	--
Dare	19,419	15,360	3,673	386	--	5,905	3,280	2,274	351	--
Edgecombe	60,114	35,861	--	15,668	8,585	13,964	8,474	--	3,288	2,202
Gates	33,388	26,352	--	5,769	1,267	7,057	4,731	--	1,768	558
Halifax	45,783	17,556	--	17,992	10,235	13,222	4,775	--	3,990	4,457
Hertford	28,064	17,725	--	3,863	6,476	7,034	3,787	--	979	2,268
Hyde	28,049	20,866	1,134	6,049	--	7,568	5,557	236	1,726	49
Martin	40,440	34,162	--	953	5,325	8,821	6,875	--	397	1,549
Nash	47,150	26,880	--	11,832	8,438	11,573	5,822	--	3,364	2,387
Northampton	38,190	9,723	--	15,153	13,314	10,656	2,472	--	4,141	4,043
Pamlico	41,221	26,577	--	8,305	6,339	11,267	6,022	--	3,212	2,033
Pasquotank	22,993	9,400	5,206	4,999	3,388	6,758	2,198	1,087	2,558	915
Perquimans	17,916	10,901	1,980	312	4,723	5,496	2,749	417	968	1,362
Pitt	53,112	25,693	1,836	19,302	6,281	13,694	6,400	362	5,502	1,430
Tyrrell	36,236	25,706	2,311	6,701	1,518	10,098	6,447	453	2,705	493
Washington	24,748	18,376	--	5,931	441	6,694	3,663	--	2,836	195
Wilson	35,312	26,052	--	5,049	4,211	7,278	4,801	--	1,198	1,279
Total	835,620	542,083	23,132	168,410	101,995	213,973	123,167	6,283	53,135	31,388

Unit Tables

Table 10.--Area of commercial forest land, by forest type and ownership class, Northern Coastal Plain of North Carolina, 1984

Forest type	Ownership class					
	All	National	Other	Forest	Forest	Other
	ownerships	Forest	public	industry	industry-	private
					leased	
<hr/>						
<div>----- Acres -----</div>						
Softwood types:						
White pine-hemlock	--	--	--	--	--	--
Spruce-fir	--	--	--	--	--	--
Longleaf pine	26,490	16,437	1,723	2,384	--	5,946
Slash pine	10,059	--	--	2,813	3,381	3,865
Loblolly pine	1,137,861	17,626	13,105	523,234	12,750	571,146
Shortleaf pine	5,895	--	--	--	--	5,895
Virginia pine	--	--	--	--	--	--
Sand pine	--	--	--	--	--	--
Eastern redcedar	--	--	--	--	--	--
Pond pine	289,782	30,206	30,481	46,404	--	182,691
Spruce pine	--	--	--	--	--	--
Pitch pine	--	--	--	--	--	--
Table Mountain pine	--	--	--	--	--	--
<hr/>						
Total	1,470,087	64,269	45,309	574,835	16,131	769,543
<hr/>						
Hardwood types:						
Oak-pine	481,283	35,702	6,561	57,500	3,735	377,785
Oak-hickory	754,577	4,590	10,221	74,975	6,201	658,590
Chestnut oak	--	--	--	--	--	--
Southern scrub oak	--	--	--	--	--	--
Oak-gum-cypress	979,727	7,255	62,471	193,544	6,391	710,066
Elm-ash-cottonwood	75,663	--	1,726	22,883	--	51,054
Maple-beech-birch	--	--	--	--	--	--
<hr/>						
Total	2,291,250	47,547	80,979	348,902	16,327	1,797,495
<hr/>						
All types	3,761,337	111,816	126,288	923,737	32,458	2,567,038

Table 11.--Area of commercial forest land, by ownership and stocking classes of growing-stock trees, Northern Coastal Plain of North Carolina, 1984

Ownership class	All classes	Stocking percentage ^a				
		> 130	100-130	60-99	16.7-59	< 16.7
		----- Acres -----				
National Forest	111,816	5,327	27,998	44,145	34,346	--
Other public	126,288	8,185	45,200	49,963	18,450	4,490
Forest industry	923,737	115,375	464,292	253,378	64,283	26,409
Forest industry-leased	32,458	7,782	13,489	7,910	2,851	426
Other private	2,567,038	222,921	1,061,537	982,344	244,040	56,196
All ownerships	3,761,337	359,590	1,612,516	1,337,740	363,970	87,521

^aSee stocking standards on page 11.

Table 12.--Area of commercial forest land, by stand-age and broad management classes, all ownerships, Northern Coastal Plain of North Carolina, 1984

Stand-age class (years)	All classes	Broad management class				
		Pine plantation	Natural pine	Oak-pine	Upland hardwood	Lowland hardwood
----- Acres -----						
0-10	575,683	206,914	61,464	96,666	133,255	77,384
11-20	455,232	242,060	71,145	44,784	54,959	42,284
21-30	369,967	59,402	151,938	68,340	41,802	48,485
31-40	415,972	3,187	213,492	37,927	93,452	67,914
41-50	434,528	--	131,764	40,730	117,076	144,958
51-60	413,617	--	112,333	48,047	111,438	141,799
61-70	302,239	--	61,806	40,235	60,814	139,384
71-80	158,395	--	35,035	26,185	34,599	62,576
81+	197,992	--	23,295	11,980	12,437	150,280
No manageable stand	437,712	6,750	89,502	66,389	94,745	180,326
All classes	3,761,337	518,313	951,774	481,283	754,577	1,055,390

Table 13.--Area of commercial forest land, by stand-age and broad management classes, public ownerships, Northern Coastal Plain of North Carolina, 1984

Stand-age class (years)	All classes	Broad management class				
		Pine plantation	Natural pine	Oak-pine	Upland hardwood	Lowland hardwood
----- Acres -----						
0-10	9,986	1,927	5,755	292	351	1,661
11-20	14,053	393	3,394	1,711	--	8,555
21-30	19,133	1,233	10,982	4,590	--	2,328
31-40	22,313	--	17,361	2,664	--	2,288
41-50	35,536	--	19,885	1,889	290	13,472
51-60	33,854	--	11,573	2,579	4,367	15,335
61-70	25,236	--	6,055	2,753	4,590	11,838
71-80	10,489	--	3,647	1,927	1,723	3,192
81+	6,085	--	4,374	--	--	1,711
No manageable stand	61,419	2,885	20,114	23,858	3,490	11,072
All classes	238,104	6,438	103,140	42,263	14,811	71,452

Table 14.--Area of commercial forest land, by stand-age and broad management classes, forest industry,^a Northern Coastal Plain of North Carolina, 1984

Stand-age class (years)	All classes	Broad management class				
		Pine plantation	Natural pine	Oak-pine	Upland hardwood	Lowland hardwood
		----- Acres -----				
0-10	217,723	146,906	14,706	17,178	12,396	26,537
11-20	283,624	228,055	20,672	14,903	10,093	9,901
21-30	98,869	55,749	26,081	4,754	3,433	8,852
31-40	43,558	3,187	26,602	—	2,702	11,067
41-50	59,660	—	21,029	3,269	11,142	24,220
51-60	57,376	—	21,847	3,060	8,153	24,316
61-70	47,273	—	6,316	7,561	5,145	28,251
71-80	34,153	—	7,321	2,702	2,930	21,200
81+	34,993	—	2,396	1,479	1,048	30,070
No manageable stand	78,966	—	10,099	6,329	24,134	38,404
All classes	956,195	433,897	157,069	61,235	81,176	222,818

^aIncludes 32,458 acres of other private land under long-term lease.

Table 15.--Area of commercial forest land, by stand-age and broad management classes, other private ownerships,^a Northern Coastal Plain of North Carolina, 1984

Stand-age class (years)	All classes	Broad management class				
		Pine plantation	Natural pine	Oak-pine	Upland hardwood	Lowland hardwood
		----- Acres -----				
0-10	347,974	58,081	41,003	79,196	120,508	49,186
11-20	157,555	13,612	47,079	28,170	44,866	23,828
21-30	251,965	2,420	114,875	58,996	38,369	37,305
31-40	350,101	--	169,529	35,263	90,750	54,559
41-50	339,332	--	90,850	35,572	105,644	107,266
51-60	322,387	--	78,913	42,408	98,918	102,148
61-70	229,730	--	49,435	29,921	51,079	99,295
71-80	113,753	--	24,067	21,556	29,946	38,184
81+	156,914	--	16,525	10,501	11,389	118,499
No manageable stand	297,327	3,865	59,289	36,202	67,121	130,850
All classes	2,567,038	77,978	691,565	377,785	658,590	761,120

^aExcludes 32,458 acres of other private land under long-term lease to forest industry.

Table 16.--Area of commercial forest land, by broad management and stand-volume classes, Northern Coastal Plain of North Carolina, 1984

Broad management class	All classes	Stand-volume class (cubic feet of growing stock per acre)				
		0-499	500-999	1000-1499	1500-1999	2000+
		----- Acres -----				
Pine plantation	518,313	257,730	79,074	72,560	60,512	48,437
Natural pine	951,774	196,755	87,006	95,857	130,678	441,478
Oak-pine	481,283	157,044	87,477	47,903	64,788	124,071
Upland hardwood	754,577	178,857	103,350	113,263	134,929	224,178
Lowland hardwood	1,055,390	198,827	81,554	113,656	130,075	531,278
All classes	3,761,337	989,213	438,461	443,239	520,982	1,369,442

Table 17.--Volume of growing stock on commercial forest land, by broad management class, species group, and stand-age class, Northern Coastal Plain of North Carolina, 1984

Broad management class and species group	All classes	No manageable stand	Stand-age class (years)								
			0-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81+
----- Thousand cubic feet -----											
Pine plantation:											
Softwood	350,634	3,163	15,913	222,676	102,780	6,102	--	--	--	--	--
Hardwood	17,936	--	1,296	8,929	7,342	369	--	--	--	--	--
Total	368,570	3,163	17,209	231,605	110,122	6,471	--	--	--	--	--
Natural pine:											
Softwood	1,615,662	24,441	3,451	62,512	191,280	440,904	273,446	295,472	161,811	99,291	63,054
Hardwood	284,108	1,883	2,238	11,691	22,402	69,886	42,658	54,392	35,800	23,757	19,401
Total	1,899,770	26,324	5,689	74,203	213,682	510,790	316,104	349,864	197,611	123,048	82,455
Oak-pine:											
Softwood	339,850	23,211	9,956	19,820	45,104	38,192	34,684	59,681	45,234	42,572	21,396
Hardwood	318,578	4,733	10,617	15,001	29,308	29,075	39,515	67,287	58,560	40,278	24,204
Total	658,428	27,944	20,573	34,821	74,412	67,267	74,199	126,968	103,794	82,850	45,600
Upland hardwood:											
Softwood	143,615	7,080	6,477	6,948	9,646	12,238	27,814	40,982	20,912	11,518	--
Hardwood	998,536	29,148	41,686	37,706	46,096	131,986	237,960	218,030	138,554	86,353	31,017
Total	1,142,151	36,228	48,163	44,654	55,742	144,224	265,774	259,012	159,466	97,871	31,017
Lowland hardwood:											
Softwood	308,350	18,404	3,079	2,447	15,668	14,497	24,931	27,887	60,030	29,464	111,943
Hardwood	2,003,919	69,905	12,264	27,902	47,927	142,853	323,465	368,021	366,720	178,443	466,419
Total	2,312,269	88,309	15,343	30,349	63,595	157,350	348,396	395,908	426,750	207,907	578,362
All classes:											
Softwood	2,758,111	76,299	38,876	314,403	364,478	511,933	360,875	424,022	287,987	182,845	196,393
Hardwood	3,623,077	105,669	68,101	101,229	153,075	374,169	643,598	707,730	599,634	328,831	541,041
Total	6,381,188	181,968	106,977	415,632	517,553	886,102	1,004,473	1,131,752	887,621	511,676	737,434

Table 18.--Net annual growth of growing stock on commercial forest land, by broad management class, species group, and stand-age class, Northern Coastal Plain of North Carolina, 1983

Broad management class ^a and species group	All classes	No manageable stand	Stand-age class ^a (years)								
			0-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81+
----- Thousand cubic feet -----											
Pine plantation:											
Softwood	37,915	361	4,320	24,506	8,443	285	--	--	--	--	--
Hardwood	1,489	--	43	961	466	19	--	--	--	--	--
Total	39,404	361	4,363	25,467	8,909	304	--	--	--	--	--
Natural pine:											
Softwood	65,975	745	341	6,358	12,124	19,332	9,635	8,615	4,628	2,633	1,564
Hardwood	17,224	190	218	749	1,721	4,850	2,853	3,008	1,814	1,020	801
Total	83,199	935	559	7,107	13,845	24,182	12,488	11,623	6,442	3,653	2,365
Oak-pine:											
Softwood	11,709	551	607	1,589	1,565	1,458	1,357	1,616	1,384	1,097	485
Hardwood	14,366	364	397	1,147	1,999	1,531	1,714	2,419	2,590	1,330	875
Total	26,075	915	1,004	2,736	3,564	2,989	3,071	4,035	3,974	2,427	1,360
Upland hardwood:											
Softwood	4,781	247	245	456	344	441	997	1,228	479	344	--
Hardwood	41,500	1,204	1,775	2,315	2,626	6,738	9,910	8,389	4,867	2,893	783
Total	46,281	1,451	2,020	2,771	2,970	7,179	10,907	9,617	5,346	3,237	783
Lowland hardwood:											
Softwood	9,096	717	95	266	707	625	759	752	1,795	599	2,781
Hardwood	66,051	2,604	428	1,519	3,168	5,994	12,903	11,414	10,768	5,037	12,216
Total	75,147	3,321	523	1,785	3,875	6,619	13,662	12,166	12,563	5,636	14,997
All classes:											
Softwood	129,476	2,621	5,608	33,175	23,183	22,141	12,748	12,211	8,286	4,673	4,830
Hardwood	140,630	4,362	2,861	6,691	9,980	19,132	27,380	25,230	20,039	10,280	14,675
Total	270,106	6,983	8,469	39,866	33,163	41,273	40,128	37,441	28,325	14,953	19,505

^a Classifications at the end of the remeasurement period.

Table 19.--Annual removals of growing stock on commercial forest land, by broad management class, species group, and stand-age class, Northern Coastal Plain of North Carolina, 1983

Broad management class and species group	All classes	manageable stand	Stand-age class ^a (years)										Thousand cubic feet	
			0-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81+			

Pine plantations:														
Softwood	1,697	--	--	1,697	--	--	--	--	--	--	--	--	--	--
Hardwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	1,697	--	--	1,697	--	--	--	--	--	--	--	--	--	--
Natural pine:														
Softwood	91,569	2,800	469	3,508	16,465	14,473	25,239	8,960	9,564	5,145	4,946	366		
Hardwood	10,296	--	--	878	1,720	2,097	2,584	641	1,163	388	366			
Total	101,865	3,259	469	4,386	18,185	16,570	27,823	9,601	10,727	5,533	5,312			
Oak-pine:														
Softwood	18,042	1,313	965	726	1,547	3,142	4,287	2,409	1,933	798	922	343		
Hardwood	10,389	562	457	330	959	2,101	2,386	737	2,392	122	343			
Total	28,431	1,875	1,422	1,056	2,506	5,243	6,673	3,146	4,325	920	1,265			
Upland hardwood:														
Softwood	8,412	341	--	263	307	1,793	721	2,243	798	495	1,447			
Hardwood	27,632	2,460	250	2,844	2,088	3,339	6,351	6,022	1,820	762	1,696			
Total	36,044	2,801	250	3,107	2,395	5,132	7,072	8,265	2,618	1,261	3,143			
Lowland hardwood:														
Softwood	9,730	879	203	--	--	1,092	1,005	3,036	2,847	372	296			
Hardwood	36,206	4,106	73	--	1,127	3,658	4,591	6,195	4,863	5,761	5,832			
Total	45,936	4,985	276	--	1,127	4,750	5,596	9,231	7,710	6,133	6,128			
All classes:														
Softwood	129,450	5,333	1,637	6,194	18,319	20,500	31,252	16,648	15,142	6,814	7,611			
Hardwood	84,523	7,587	780	4,052	5,894	11,195	15,912	13,595	10,238	7,033	8,237			
Total	213,973	12,920	2,417	10,246	24,213	31,695	47,164	30,243	25,380	13,847	15,848			

Classification before timber removals occurred.

^aClassification before timber removals occurred.

Table 20.--Merchantable volume of all live trees and growing stock on commercial forest land, by forest-type group, and species group, Northern Coastal Plain of North Carolina, 1984

Forest-type group	All live trees					Growing stock				
	All species	Pine	Other softwood	Soft hardwood	Hard hardwood	All species	Pine	Other softwood	Soft hardwood	Hard hardwood
	----- <u>Thousand cubic feet</u> -----									
White pine-hemlock	--	--	--	--	--	--	--	--	--	--
Spruce-fir	--	--	--	--	--	--	--	--	--	--
Longleaf-slash pine	54,749	51,957	--	2,573	219	53,940	51,957	--	1,764	219
Loblolly-shortleaf pine	2,255,844	1,919,187	5,874	231,032	99,751	2,214,400	1,909,010	5,329	213,983	86,078
Oak-pine	692,318	334,294	7,751	219,183	131,090	658,428	333,159	6,691	204,145	114,433
Oak-hickory	1,219,085	144,189	--	466,197	608,699	1,142,151	143,615	--	435,154	563,382
Oak-gum-cypress	2,447,914	71,957	239,509	1,865,151	271,297	2,175,549	71,358	227,637	1,667,567	208,987
Elm-ash-cottonwood	153,098	2,205	7,673	97,603	45,617	136,720	2,005	7,350	89,157	38,208
Maple-beech-birch	--	--	--	--	--	--	--	--	--	--
All types	6,823,008	2,523,789	260,807	2,881,739	1,156,673	6,381,188	2,511,104	247,007	2,611,770	1,011,307

Table 21.--Area of commercial forest land treated or disturbed annually and retained in commercial forest land, by treatment or disturbance and ownership class, Northern Coastal Plain of North Carolina, 1974 to 1984

Treatment or disturbance	All ownerships	Ownership class			
		Public	Forest industry	Forest industry- leased	Other private
----- Acres ^a -----					
Final harvest	64,529	1,525	21,982	792	40,230
Selective cutting and high grading	15,863	319	256	--	15,288
Commercial thinning	5,361	608	2,128	--	2,625
Other stand improvement	6,038	169	3,227	120	2,522
Site preparation	35,101	201	19,948	447	14,505
Artificial regeneration ^b	25,580	197	18,309	522	6,552
Natural regeneration ^b	27,324	227	3,512	--	23,585
Natural disturbance	6,422	746	1,433	--	4,243
Other treatment or disturbance	28,663	2,002	5,179	--	21,482

^aSince some acres experience more than one treatment or disturbance, there are no column totals.

^bIncludes establishment of trees for timber production on forest and nonforest land.

Table 22.--Area of commercial forest land treated or disturbed annually and retained in commercial forest land, by treatment or disturbance and broad management class, Northern Coastal Plain of North Carolina, 1974 to 1984

Treatment or disturbance	All classes	Broad management class ^a				
		Pine plantation	Natural pine	Oak- pine	Upland hardwood	Lowland hardwood
----- Acres ^b -----						
Final harvest	64,529	1,543	30,457	10,399	11,211	10,919
Selective cutting and high grading	15,863	—	2,956	2,788	5,328	4,791
Commercial thinning	5,361	1,637	1,994	817	325	588
Other stand improvement	6,038	936	2,030	1,014	1,178	880
Site preparation	35,101	2,061	16,377	5,607	5,748	5,308
Other treatment	6,422	—	2,621	1,036	1,843	922
Natural disturbance	28,663	713	14,493	4,781	4,098	4,578

^aClassification before treatment or disturbance.

^bSince some acres experience more than one treatment or disturbance, there are no column totals.

Table 23.--Area of commercial forest land regenerated annually, by type of regeneration and broad management class, Northern Coastal Plain of North Carolina, 1974 to 1984

Type of regeneration	All classes	Broad management class ^a				
		Pine plantation	Natural pine	Oak- pine	Upland hardwood	Lowland hardwood
----- Acres -----						
Artificial regeneration following harvest	18,541	16,092	--	1,593	538	318
Natural regeneration following harvest	21,279	301	3,035	5,016	8,599	4,328
Other artificial regen- eration on forest land	6,880	6,486	--	235	159	--
Other natural regen- eration on forest land	3,888	--	923	1,622	1,042	301
Artificial regeneration on nonforest land	159	--	--	--	--	159
Natural reversion of nonforest land	2,157	--	1,115	208	295	539
Total	52,904	22,879	5,073	8,674	10,633	5,645

^aClassification after regeneration.

Table 24.--Area of commercial forest land, by treatment opportunity and broad management classes, Northern Coastal Plain of North Carolina, 1984

Treatment opportunity class	All classes	Broad management class				
		Pine plantation	Natural pine	Oak- pine	Upland hardwood	Lowland hardwood
----- Acres -----						
Salvage	5,146	--	--	5,146	--	--
Harvest	478,445	--	152,585	72,995	75,015	177,850
Commercial thinning	228,372	126,588	81,252	5,528	--	15,004
Other stand improvement	306,701	28,597	50,273	55,753	104,049	68,029
Stand conversion	62,232	--	2,799	--	33,250	26,183
Regeneration	417,108	6,750	85,496	66,389	94,745	163,728
Stands in relatively good condition ^a	2,027,987	356,378	555,418	272,950	447,518	395,723
Adverse sites ^a	235,346	--	23,951	2,522	--	208,873
All classes	3,761,337	518,313	951,774	481,283	754,577	1,055,390

^aAreas where management opportunities are severely limited because of steep slopes or poor drainage.

Table 25.--Area of commercial forest land, by treatment opportunity and ownership classes, Northern Coastal Plain of North Carolina, 1984

Treatment opportunity class	All ownerships	Ownership class			
		Public	Forest industry	Forest industry- leased	Other private
----- Acres -----					
Salvage	5,146	--	--	--	5,146
Harvest	478,445	32,021	72,879	3,540	370,005
Commercial thinning	228,372	3,831	128,575	12,801	83,165
Other stand improvement	306,701	13,735	79,612	--	213,354
Stand conversion	62,232	2,664	2,767	--	56,801
Regeneration	417,108	59,725	70,413	3,277	283,693
Stands in relatively good condition	2,027,987	100,678	523,970	12,840	1,390,499
Adverse sites ^a	235,346	25,450	45,521	--	164,375
All classes	3,761,337	238,104	923,737	32,458	2,567,038

^a Areas where management opportunities are severely limited because of steep slopes or poor drainage.

Table 26.--Merchantable volume of all live trees and growing stock on commercial forest land, by ownership class and species group, Northern Coastal Plain of North Carolina, 1984

Ownership class	All live trees					Growing stock				
	All species	Pine	Other softwood	Soft hardwood	Hard hardwood	All species	Pine	Other softwood	Soft hardwood	Hard hardwood
----- Thousand cubic feet -----										
National Forest	175,602	127,972	3,956	32,053	11,621	168,596	127,088	1,794	28,784	10,930
Other public	238,980	74,821	11,228	124,205	28,726	218,169	74,582	9,004	115,053	19,530
Forest industry	1,295,443	578,277	39,717	527,057	150,392	1,211,447	575,848	37,025	471,417	127,157
Forest industry-leased	30,326	17,649	--	8,390	4,287	27,143	17,649	--	5,650	3,844
Other private	5,082,657	1,725,070	205,906	2,190,034	961,647	4,755,833	1,715,937	199,184	1,990,866	849,846
All ownerships	6,823,008	2,523,789	260,807	2,881,739	1,156,673	6,381,188	2,511,104	247,007	2,611,770	1,011,307

Table 27.--Volume of sawtimber on commercial forest land, by ownership class and species group, Northern Coastal Plain of North Carolina, 1984

Ownership class	Small sawtimber ^a					Large sawtimber ^b				
	All species	Pine	Other softwood	Soft hardwood	Hard hardwood	All species	Pine	Other softwood	Soft hardwood	Hard hardwood
----- Thousand board feet -----										
National Forest	326,851	286,077	--	22,146	18,628	295,528	221,517	2,976	51,165	19,870
Other public	327,931	161,694	15,643	129,295	21,299	304,631	101,222	12,147	158,278	32,984
Forest industry	1,452,237	881,710	18,161	461,145	91,221	1,941,914	491,587	136,905	926,087	387,335
Forest industry-leased	20,785	12,063	--	5,259	3,463	23,907	3,467	--	10,344	10,096
Other private	6,632,286	3,446,489	231,653	2,135,875	818,269	10,204,380	3,942,850	648,264	3,807,440	1,805,826
All ownerships	8,760,090	4,788,033	265,457	2,753,720	952,880	12,770,360	4,760,643	800,292	4,953,314	2,256,111

^aVolume of sawtimber trees less than 15.0 inches at d.b.h.

^bVolume of sawtimber trees 15.0 inches and larger at d.b.h.

Table 28.--Net annual growth and removals of growing stock on commercial forest land, by ownership class and species group, Northern Coastal Plain of North Carolina, 1983

Ownership class	Net annual growth					Annual timber removals				
	All species	Pine	Other : softwood	Soft : hardwood	Hard : hardwood	All species	Pine	Other : softwood	Soft : hardwood	Hard : hardwood
Thousand cubic feet										
National Forest	6,161	4,455	44	1,137	525	1,184	1,060	--	--	124
Other public	8,323	2,575	669	4,318	761	2,119	699	858	562	--
Forest industry	67,138	43,637	1,357	17,661	4,483	45,392	29,523	421	9,553	5,895
Forest industry-leased	2,149	1,755	--	280	114	1,752	871	--	558	323
Other private	186,335	69,826	5,158	77,008	34,343	163,526	91,014	5,004	42,462	25,046
All ownerships	270,106	122,248	7,228	100,404	40,226	213,973	123,167	6,283	53,135	31,388

Table 29.--Net annual growth and removals of sawtimber on commercial forest land, by ownership class and species group, Northern Coastal Plain of North Carolina, 1983

Ownership class	Net annual growth					Annual timber removals				
	All species	Pine	Other : softwood	Soft : hardwood	Hard : hardwood	All species	Pine	Other : softwood	Soft : hardwood	Hard : hardwood
Thousand board feet										
National Forest	26,677	21,032	316	3,524	1,805	1,720	1,720	--	--	--
Other public	33,722	13,930	2,687	13,557	3,548	7,329	2,989	4,007	333	--
Forest industry	191,447	106,364	5,059	60,122	19,902	159,522	119,393	1,980	22,503	15,646
Forest industry-leased	9,794	8,759	--	660	375	8,153	4,321	--	1,813	2,019
Other private	814,093	353,537	27,161	296,705	136,690	658,896	413,660	17,145	143,761	84,330
All ownerships	1,075,733	503,622	35,223	374,568	162,320	835,620	542,083	23,132	168,410	101,995

Table 30.--Volume of timber on commercial forest land, by class and species group, Northern Coastal Plain of North Carolina, 1984

Class of timber	All species	Pine	Other softwood	Soft hardwood	Hard hardwood
----- Thousand cubic feet -----					
Sawtimber trees:					
Saw-log portion	3,688,592	1,654,875	187,850	1,327,068	518,799
Upper-stem portion ^a	808,876	218,851	23,041	394,500	172,484
Total	4,497,468	1,873,726	210,891	1,721,568	691,283
Poletimber trees	1,883,720	637,378	36,116	890,202	320,024
All growing-stock trees	6,381,188	2,511,104	247,007	2,611,770	1,011,307
Rough trees:					
Sawtimber size	113,499	4,982	1,745	77,026	29,746
Poletimber size	206,618	7,370	--	99,974	99,274
Total	320,117	12,352	1,745	177,000	129,020
Rotten trees:					
Sawtimber size	112,562	333	11,881	86,180	14,168
Poletimber size	9,141	--	174	6,789	2,178
Total	121,703	333	12,055	92,969	16,346
Salvable dead trees:					
Sawtimber size	4,232	3,883	153	126	70
Poletimber size	2,966	2,669	96	113	88
Total	7,198	6,552	249	239	158
Total, all timber	6,830,206	2,530,341	261,056	2,881,978	1,156,831

^aIncludes cull sections in the saw-log portion.

Table 31.--Number of all live trees on commercial forest land, by species and diameter class, Northern Coastal Plain of North Carolina, 1984

Species	All classes	Diameter class (inches at breast height)											
		1.0- 2.9	3.0- 4.9	5.0- 6.9	7.0- 8.9	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9	29.0 and larger
----- Thousand trees -----													
Softwood:													
Longleaf pine	4,424	880	328	890	551	616	490	316	269	73	11	--	--
Slash pine	1,861	155	--	535	582	483	84	22	--	--	--	--	--
Shortleaf pine	4,960	1,621	504	460	810	923	342	244	44	12	--	--	--
Loblolly pine	491,508	171,923	123,639	91,234	48,632	20,487	13,185	9,522	6,305	3,673	1,626	1,258	24
Pond pine	121,922	43,176	29,389	17,994	14,379	9,073	4,773	1,944	644	357	140	53	--
Baldcypress	13,825	5,391	1,819	1,196	832	1,183	571	744	584	449	342	592	122
Pondcypress	1,893	470	--	322	489	98	47	129	145	105	37	29	22
Cedars	23,713	12,151	5,863	2,554	1,788	598	414	171	84	66	8	16	--
Total softwoods	664,106	235,767	161,542	115,185	68,063	33,461	19,906	13,092	8,075	4,735	2,164	1,948	168
Hardwood:													
Select white oaks	82,827	43,090	15,496	8,027	5,514	3,879	2,481	1,690	1,062	812	329	382	65
Select red oaks	13,403	8,553	2,079	312	701	426	403	227	230	165	83	171	53
Chestnut oak	335	335	--	--	--	--	--	--	--	--	--	--	--
Other white oaks	20,819	11,409	3,920	1,743	1,529	657	512	410	252	185	37	138	27
Other red oaks	147,636	90,305	25,927	11,989	8,124	4,834	2,618	1,506	740	849	264	422	58
Hickory	24,646	17,574	2,766	1,642	1,140	634	258	212	91	137	106	82	4
Soft maple	661,510	494,213	99,289	30,304	16,456	9,145	5,065	3,123	1,868	853	574	577	43
Beech	11,822	6,654	2,276	391	696	512	251	349	344	92	110	129	18
Sweetgum	505,038	355,786	78,758	34,758	13,802	8,457	6,078	3,290	2,034	1,048	520	469	38
Tupelo and blackgum	338,763	198,539	59,781	28,782	15,684	11,517	8,513	5,862	4,060	2,237	1,610	1,685	493
Ash	92,719	61,819	18,204	6,175	2,967	1,419	1,014	495	315	159	70	79	3
Cottonwood	9,394	4,344	2,608	1,024	573	350	132	172	90	48	19	34	--
Yellow-poplar	57,158	33,570	8,006	3,867	3,066	2,360	1,809	1,666	1,141	577	571	486	39
Bay and magnolia	170,043	130,281	27,493	6,825	3,737	921	315	330	58	44	17	22	--
Black cherry	14,006	11,030	1,826	757	228	51	58	21	28	--	--	7	--
Black walnut	98	--	--	--	--	38	26	--	16	13	--	5	--
Sycamore	3,326	1,816	1,062	168	--	110	33	23	--	25	--	82	7
Elm	23,169	12,966	5,516	1,486	841	825	773	319	186	96	79	74	8
Other eastern hardwoods	476,401	359,160	82,468	22,835	8,080	2,033	1,081	343	259	80	48	14	--
Total hardwoods	2,653,113	1,841,444	437,475	161,085	83,138	48,168	31,420	20,038	12,774	7,420	4,437	4,858	856
All species	3,317,219	2,077,211	599,017	276,270	151,201	81,629	51,326	33,130	20,849	12,155	6,601	6,806	1,024

Table 32.--Number of growing-stock trees on commercial forest land, by species and diameter class, Northern Coastal Plain of North Carolina, 1984

Species	All classes	Diameter class (inches at breast height)											
		1.0- 2.9	3.0- 4.9	5.0- 6.9	7.0- 8.9	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9	29.0 and larger
		----- Thousand trees -----											
Softwood:													
Longleaf pine	4,248	704	328	890	551	616	490	316	269	73	11	--	--
Slash pine	1,706	--	--	535	582	483	84	22	--	--	--	--	--
Shortleaf pine	4,805	1,466	504	460	810	923	342	244	44	12	--	--	--
Loblolly pine	477,420	160,823	121,792	90,645	48,365	20,382	13,041	9,486	6,305	3,673	1,626	1,258	24
Pond pine	90,048	18,649	23,974	16,733	13,785	9,073	4,716	1,924	644	357	140	53	--
Baldcypress	12,324	4,286	1,819	1,196	763	1,123	547	676	541	415	342	542	74
Pondcypress	1,675	319	--	322	489	98	47	129	91	105	37	24	14
Cedars	22,512	11,077	5,863	2,554	1,788	515	414	154	69	54	8	16	--
Total softwoods	614,738	197,324	154,280	113,335	67,133	33,213	19,681	12,951	7,963	4,689	2,164	1,893	112
Hardwood:													
Select white oaks	66,664	30,109	13,666	7,423	4,990	3,803	2,481	1,600	1,033	812	329	358	60
Select red oaks	12,381	7,734	1,920	312	701	426	403	227	230	129	83	171	45
Chestnut oak	174	174	--	--	--	--	--	--	--	--	--	--	--
Other white oaks	14,708	6,953	2,771	1,528	1,433	622	432	368	227	173	37	138	26
Other red oaks	120,221	69,206	22,057	10,756	7,463	4,527	2,540	1,468	705	838	245	381	35
Hickory	19,507	13,012	2,437	1,555	1,140	575	205	195	75	137	97	75	4
Soft maple	390,908	263,699	72,846	23,556	13,640	7,700	3,817	2,616	1,512	689	468	346	19
Beech	8,277	3,985	1,765	391	634	435	226	289	299	81	93	72	7
Sweetgum	376,657	244,959	66,653	31,770	12,540	7,922	5,911	3,091	1,902	991	457	427	34
Tupelo and blackgum	215,663	97,725	47,540	24,741	13,760	10,281	7,819	5,407	3,592	2,031	1,262	1,302	203
Ash	41,921	24,540	8,611	3,950	2,221	840	798	415	299	120	70	57	--
Cottonwood	7,957	2,907	2,608	1,024	573	350	132	172	90	48	19	34	--
Yellow-poplar	51,956	29,663	7,142	3,709	2,882	2,320	1,785	1,666	1,141	577	561	481	29
Bay and magnolia	84,574	59,480	16,181	4,543	3,189	593	222	249	44	34	17	22	--
Black cherry	7,036	4,810	1,371	578	119	51	58	21	28	--	--	--	--
Black walnut	98	--	--	--	--	38	26	--	16	13	--	5	--
Sycamore	2,929	1,460	1,062	168	--	110	33	--	--	25	--	66	5
Elm	15,086	6,426	4,563	1,290	662	752	704	279	186	85	70	69	--
Other eastern hardwoods	63,617	42,264	12,562	4,397	2,476	740	650	227	201	58	28	14	--
Total hardwoods	1,500,334	909,106	285,755	121,691	68,423	42,085	28,242	18,290	11,580	6,841	3,836	4,018	467
All species	2,115,072	1,106,430	440,035	235,026	135,556	75,298	47,923	31,241	19,543	11,530	6,000	5,911	579

Table 33.--Merchantable volume of all live trees on commercial forest land, by species and diameter class, Northern Coastal Plain of North Carolina, 1984

Species	All classes	Diameter class (inches at breast height)												21.0- 28.9 :	29.0 and larger
		5.0- 6.9 :	7.0- 8.9 :	9.0- 10.9 :	11.0- 12.9 :	13.0- 14.9 :	15.0- 16.9 :	17.0- 18.9 :	19.0- 20.9 :						
Thousand cubic feet															
Softwood:															
Longleaf pine	43,664	1,421	2,712	7,146	9,494	8,314	10,158	3,850	569	--	--	--	--	--	--
Slash pine	12,263	1,526	3,966	4,968	1,335	468	--	--	--	--	--	--	--	--	--
Shortleaf pine	34,554	1,332	5,143	9,969	7,121	8,396	2,100	493	--	--	--	--	--	--	--
Loblolly pine	2,029,860	213,841	286,807	244,731	268,340	292,983	271,296	205,113	116,182	126,158	4,409	--	--	--	--
Pond pine	403,448	41,699	86,301	96,737	79,504	47,802	22,028	16,914	8,306	4,157	--	--	--	--	--
Baldcypress	186,182	3,951	6,797	14,700	10,500	19,954	20,875	20,735	20,520	50,491	17,659	--	--	--	--
Pondcypress	28,703	804	2,917	1,409	1,059	3,786	3,861	4,808	2,388	2,791	4,880	--	--	--	--
Cedars	45,922	9,197	12,624	6,768	7,103	3,597	2,423	2,771	547	892	--	--	--	--	--
Total softwoods	2,784,596	273,771	407,267	386,428	384,456	385,300	332,741	254,684	148,512	184,489	26,948	--	--	--	--
Hardwood:															
Select white oaks	327,848	20,347	31,316	41,648	44,134	42,744	40,021	40,696	20,108	33,096	13,738	--	--	--	--
Select red oaks	73,701	834	4,557	5,205	6,796	6,472	8,984	7,824	5,565	16,008	11,456	--	--	--	--
Chestnut oak	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other white oaks	75,140	4,909	7,967	6,076	8,339	9,579	8,367	8,371	2,389	12,187	6,956	--	--	--	--
Other red oaks	342,923	30,151	45,622	50,275	45,237	39,001	26,434	39,742	16,420	38,633	11,408	--	--	--	--
Hickory	52,663	3,362	6,634	6,742	5,118	5,246	3,091	6,914	7,439	7,359	758	--	--	--	--
Soft maple	614,879	82,148	100,114	101,293	86,241	76,143	61,090	34,820	29,781	38,174	5,075	--	--	--	--
Beech	55,515	1,184	4,506	5,059	4,276	8,082	10,716	3,998	5,615	10,296	1,783	--	--	--	--
Sweetgum	689,890	76,578	81,686	101,722	119,143	93,553	81,580	54,781	33,401	40,518	6,928	--	--	--	--
Tupelo and blackgum	1,064,933	80,365	98,030	126,079	144,868	144,552	130,684	90,566	78,592	116,148	55,049	--	--	--	--
Ash	110,963	15,468	18,144	15,490	17,336	12,821	12,744	7,769	4,436	6,562	193	--	--	--	--
Cottonwood	26,456	2,722	2,879	4,073	2,471	4,639	3,496	2,114	1,006	3,056	--	--	--	--	--
Yellow-poplar	308,800	10,431	19,182	28,163	35,789	48,870	46,244	29,785	36,717	46,477	7,142	--	--	--	--
Bay and magnolia	63,069	16,542	21,341	8,435	4,639	6,778	1,708	1,449	695	1,482	--	--	--	--	--
Black cherry	6,141	1,496	1,136	643	789	559	1,090	--	--	428	--	--	--	--	--
Black walnut	2,738	--	--	602	420	--	715	492	--	509	--	--	--	--	--
Sycamore	10,540	844	--	1,236	537	348	--	1,089	--	5,765	721	--	--	--	--
Elm	66,047	3,748	5,184	9,380	14,140	8,356	7,049	4,926	5,355	6,831	1,078	--	--	--	--
Other eastern hardwood	146,166	51,673	37,635	17,585	16,384	6,883	8,371	3,757	2,357	1,521	--	--	--	--	--
Total hardwoods	4,038,412	402,802	485,933	529,706	556,657	514,626	452,384	339,093	249,876	385,050	122,285	--	--	--	--
All species	6,823,008	676,573	893,200	916,134	941,113	899,926	785,125	593,777	398,388	569,539	149,233	--	--	--	--

Table 34.—Volume of growing stock on commercial forest land, by species and diameter class, Northern Coastal Plain of North Carolina, 1984

Species	Diameter class (inches at breast height)												29.0 and larger
	All classes	5.0-6.9	7.0-8.9	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9			
----- Thousand cubic feet -----													
Softwood:													
Longleaf pine	43,664	1,421	2,712	7,146	9,494	8,314	10,158	3,850	569	--	--	--	--
Slash pine	12,263	1,526	3,966	4,968	1,335	468	--	--	--	--	--	--	--
Shortleaf pine	34,554	1,332	5,143	9,969	7,121	8,396	2,100	493	--	--	--	--	--
Loblolly pine	2,022,917	212,285	285,731	243,708	266,008	292,027	271,296	205,113	116,182	126,158	4,409	--	--
Pond pine	397,706	39,759	83,503	96,737	78,731	47,571	22,028	16,914	8,306	4,157	--	--	--
Baldcypress	175,934	3,951	6,623	14,546	10,110	18,831	19,864	20,263	20,520	47,978	13,248	--	--
Pondcypress	26,396	804	2,917	1,409	1,059	3,786	2,975	4,808	2,388	2,411	3,839	--	--
Cedars	44,677	9,197	12,624	6,150	7,103	3,380	2,287	2,497	547	892	--	--	--
Total softwoods	2,758,111	270,275	403,219	384,633	380,961	382,773	330,708	253,938	148,512	181,596	21,496		
Hardwood:													
Select white oaks	319,166	19,296	28,961	40,980	44,134	41,411	39,156	40,696	20,108	31,476	12,948		
Select red oaks	71,843	834	4,557	5,205	6,796	6,472	8,984	6,758	5,565	16,008	10,664		
Chestnut oak	69,913	4,360	7,397	5,777	7,226	8,642	7,619	8,017	2,389	12,187	6,299		
Other white oaks	325,806	27,828	42,379	48,060	44,188	38,173	25,589	39,181	15,596	36,432	8,380		
Other red oaks	49,236	3,202	6,634	6,142	4,116	5,129	2,648	6,914	6,754	6,939	758		
Hickory	520,571	66,311	87,304	88,995	68,869	67,630	52,758	30,898	26,758	28,110	2,938		
Soft maple	46,815	1,184	4,231	4,271	3,768	7,179	9,464	3,739	5,193	6,697	1,089		
Beech	655,913	71,076	75,141	96,713	117,147	89,479	78,394	52,855	30,707	38,217	6,184		
Sweetgum	954,996	71,273	88,898	115,199	136,067	138,024	120,075	85,931	69,450	98,108	31,971		
Tupelo and blackgum	91,968	10,994	14,509	10,407	15,365	12,113	12,242	6,625	4,436	5,277	--		
Ash	26,456	2,722	2,879	4,073	2,471	4,639	3,496	2,114	1,006	3,056	--		
Cottonwood	304,612	9,961	18,283	27,686	35,451	48,870	46,244	29,785	36,412	46,172	5,748		
Yellow-poplar	48,991	11,023	17,769	5,769	3,770	5,694	1,578	1,211	695	1,482	--		
Bay and magnolia	4,837	1,101	655	643	789	559	1,090	--	--	--	--		
Black cherry	2,738	--	--	602	420	--	715	492	--	509	--		
Black walnut	9,251	844	--	1,236	537	--	--	1,089	--	4,988	557		
Sycamore	59,423	3,248	4,287	8,650	13,064	7,464	7,049	4,449	4,727	6,485	--		
Elm	60,542	11,094	11,954	7,629	11,104	5,640	7,101	2,718	1,781	1,521	--		
Other eastern hardwoods													
Total hardwoods	3,623,077	316,351	415,838	478,037	515,282	487,118	424,202	323,472	231,577	343,664	87,536		
All species	6,381,188	586,626	819,057	862,670	896,243	869,891	754,910	577,410	380,089	525,260	109,032		

Table 35.--Volume of sawtimber on commercial forest land, by species and diameter class, Northern Coastal Plain of North Carolina, 1984

Species	All classes	Diameter class (inches at breast height)							
		9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9	29.0 and larger
----- Thousand board feet -----									
Softwood:									
Longleaf pine	205,083	29,155	46,049	44,120	58,681	23,488	3,590	--	--
Slash pine	27,262	18,912	5,944	2,406	--	--	--	--	--
Shortleaf pine	126,877	35,515	32,818	43,731	11,923	2,890	--	--	--
Loblolly pine	7,926,655	870,547	1,190,363	1,503,513	1,525,220	1,229,666	732,383	842,867	32,096
Pond pine	1,262,799	364,627	358,861	241,472	121,688	98,776	50,830	26,545	--
Baldcypress	838,581	44,538	38,196	83,365	95,251	104,182	110,996	277,933	84,120
Pondcypress	118,266	4,861	4,390	17,146	14,287	24,875	13,010	14,233	25,464
Cedars	108,902	23,900	31,929	17,132	12,620	14,472	3,335	5,514	--
Total softwoods	10,614,425	1,392,055	1,708,550	1,952,885	1,839,670	1,498,349	914,144	1,167,092	141,680
Hardwood:									
Select white oaks	1,050,441	--	151,003	164,937	175,557	195,334	102,889	177,929	82,792
Select red oaks	323,375	--	22,117	27,095	41,054	34,584	29,313	94,886	74,326
Chestnut oak	--	--	--	--	--	--	--	--	--
Other white oaks	254,235	--	26,549	36,318	35,142	39,326	12,254	66,941	37,705
Other red oaks	991,165	--	162,171	163,476	119,382	197,550	83,337	210,414	54,835
Hickory	159,591	--	14,307	20,822	11,792	33,845	35,003	39,142	4,680
Soft maple	1,133,762	--	223,727	257,946	222,065	140,576	128,308	144,520	16,620
Beech	146,203	--	13,632	27,291	36,919	14,850	21,056	27,794	4,661
Sweetgum	1,899,793	--	417,779	382,875	379,019	278,589	171,351	229,078	41,102
Tupelo and blackgum	2,976,536	--	422,334	530,302	517,923	406,272	351,953	544,013	203,739
Ash	230,479	--	49,900	46,386	53,203	30,925	21,994	28,071	--
Cottonwood	76,775	--	8,632	19,088	16,068	10,425	5,270	17,292	--
Yellow-poplar	1,258,945	--	127,916	211,910	226,562	158,508	207,021	286,694	40,334
Bay and magnolia	57,097	--	12,786	21,473	6,783	5,307	3,255	7,493	--
Black cherry	9,898	--	2,778	2,337	4,783	--	--	--	--
Black walnut	8,300	--	1,444	--	2,699	1,926	--	2,231	--
Sycamore	35,989	--	1,668	--	--	4,961	--	26,143	3,217
Elm	179,750	--	44,951	29,085	29,935	20,137	22,546	33,096	--
Other eastern hardwoods	123,691	--	38,347	23,218	31,539	13,231	9,336	8,020	--
Total hardwoods	10,916,025	--	1,742,041	1,964,559	1,910,425	1,586,346	1,204,886	1,943,757	564,011
All species	21,530,450	1,392,055	3,450,591	3,917,444	3,750,095	3,084,695	2,119,030	3,110,849	705,691

Table 37.--Cubic volume in the merchantable saw-log portion of sawtimber trees, by species and diameter class, Northern Coastal Plain of North Carolina, 1984

Species	All classes	Diameter class (inches at breast height)							
		9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9	29.0 and larger
		----- Thousand cubic feet -----							
Softwood:									
Longleaf pine	36,483	6,117	8,685	7,739	9,700	3,696	546	--	--
Slash pine	5,511	3,968	1,121	422	--	--	--	--	--
Shortleaf pine	23,740	7,451	6,189	7,670	1,971	459	--	--	--
Loblolly pine	1,355,129	182,641	224,502	263,716	252,119	195,271	111,535	121,112	4,233
Pond pine	234,012	76,499	67,681	42,354	20,115	15,686	7,746	3,931	--
Baldcypress	146,569	10,529	8,048	16,214	17,098	17,711	18,614	45,637	12,718
Pondcypress	20,385	1,149	925	3,335	2,565	4,229	2,182	2,315	3,685
Cedars	20,896	5,184	6,514	3,245	2,196	2,397	525	835	--
Total softwoods	1,842,725	293,538	323,665	344,695	305,764	239,449	141,148	173,830	20,636
Hardwood:									
Select white oaks	170,501	--	28,238	28,798	28,809	30,765	15,721	26,298	11,872
Select red oaks	49,791	--	4,136	4,731	6,737	5,447	4,479	14,024	10,237
Chestnut oak	--	--	--	--	--	--	--	--	--
Other white oaks	40,440	--	4,965	6,341	5,767	6,194	1,872	9,894	5,407
Other red oaks	161,270	--	30,326	28,543	19,591	31,114	12,734	31,099	7,863
Hickory	25,381	--	2,675	3,636	1,935	5,331	5,348	5,785	671
Soft maple	191,821	--	42,083	45,631	37,129	22,562	20,093	21,953	2,370
Beech	23,704	--	2,549	4,765	6,058	2,339	3,217	4,108	668
Sweetgum	321,893	--	78,584	67,731	63,372	44,714	26,834	34,797	5,861
Tupelo and blackgum	533,205	--	88,986	103,144	92,967	69,066	59,023	89,327	30,692
Ash	38,542	--	9,331	8,099	8,731	4,871	3,361	4,149	--
Cottonwood	12,813	--	1,624	3,377	2,687	1,673	825	2,627	--
Yellow-poplar	206,356	--	24,061	37,487	37,881	25,441	32,419	43,549	5,518
Bay and magnolia	9,838	--	2,405	3,799	1,134	852	510	1,138	--
Black cherry	1,736	--	523	413	800	--	--	--	--
Black walnut	1,346	--	270	--	443	303	--	330	--
Sycamore	5,540	--	314	--	--	796	--	3,971	459
Elm	30,395	--	8,455	5,145	5,005	3,232	3,531	5,027	--
Other eastern hardwoods	21,295	--	7,193	4,089	5,235	2,111	1,462	1,205	--
Total hardwoods	1,845,867	--	336,718	355,729	324,281	256,811	191,429	299,281	81,618
All species	3,688,592	293,538	660,383	700,424	630,045	496,260	332,577	473,111	102,254

Table 38.--Total volume of all live trees on commercial forest land, by species and diameter class, Northern Coastal Plain of North Carolina, 1984

Species	All classes	Diameter class (inches at breast height)															29.0 and larger
		1.0-2.9	3.0-4.9	5.0-6.9	7.0-8.9	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9					
Thousand cubic feet																	
Softwood:																	
Longleaf pine	50,949	215	522	2,111	3,316	8,265	10,790	9,386	11,404	4,305	635	--	--	--	--	--	--
Slash pine	14,547	28	--	2,007	4,735	5,729	1,521	527	--	--	--	--	--	--	--	--	--
Shortleaf pine	41,221	349	575	1,816	6,226	11,636	8,152	9,536	2,374	557	--	--	--	--	--	--	--
Loblolly pine	2,563,789	38,655	130,177	303,987	350,748	285,897	307,701	332,645	306,373	230,828	130,493	141,361	4,924	--	--	--	--
Pond pine	513,437	7,540	26,330	56,373	104,354	113,321	91,912	54,910	25,208	19,296	9,463	4,730	--	--	--	--	--
Baldcypress	232,979	1,732	2,648	6,142	8,735	18,244	12,868	24,375	25,302	25,082	24,646	60,795	22,410	--	--	--	--
Pondcypress	37,696	131	--	1,401	4,087	1,831	1,352	4,794	5,014	6,031	2,985	3,538	6,532	--	--	--	--
Cedars	66,536	2,720	8,205	11,965	15,253	8,062	8,324	4,236	2,861	3,237	639	1,034	--	--	--	--	--
Total softwoods	3,521,154	51,370	168,457	385,802	497,454	452,985	442,620	440,409	378,536	289,336	168,861	211,458	33,866	--	--	--	--
Hardwood:																	
Select white oaks	446,380	10,436	20,426	29,987	41,190	52,874	55,183	53,314	49,614	50,254	24,833	41,087	17,182	--	--	--	--
Select red oaks	96,079	2,096	2,575	1,146	5,851	6,550	8,453	7,969	11,096	9,721	6,855	19,638	14,129	--	--	--	--
Chestnut oak	22	22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other white oaks	103,008	2,991	4,089	7,216	10,622	7,842	10,586	12,054	10,498	10,435	2,966	15,086	8,623	--	--	--	--
Other red oaks	504,038	22,103	35,419	47,483	61,828	65,182	57,478	49,030	32,997	49,332	20,495	48,091	14,600	--	--	--	--
Hickory	72,478	3,260	3,112	5,189	8,704	8,492	6,312	6,430	3,773	8,365	8,979	8,953	909	--	--	--	--
Soft maple	1,040,676	114,886	152,706	119,155	127,730	124,626	104,878	92,108	73,602	41,996	35,951	46,703	6,335	--	--	--	--
Beech	75,180	1,613	3,637	1,739	5,893	6,416	5,330	10,065	13,257	4,972	7,022	12,867	2,369	--	--	--	--
Sweetgum	1,001,274	74,674	95,898	114,118	101,533	120,677	138,434	107,672	93,491	62,541	38,130	46,186	7,920	--	--	--	--
Tupelo and blackgum	1,511,940	55,450	91,740	119,862	127,915	159,306	181,086	179,614	162,727	112,967	98,842	147,127	75,304	--	--	--	--
Ash	175,843	16,471	24,592	22,316	22,398	18,377	20,323	14,851	14,611	8,918	5,084	7,635	267	--	--	--	--
Cottonwood	36,795	1,394	3,373	3,868	3,629	4,899	2,916	5,438	4,079	2,470	1,187	3,542	--	--	--	--	--
Yellow-poplar	373,472	7,613	11,496	14,153	22,923	32,630	40,971	55,605	52,377	33,667	41,464	52,451	8,122	--	--	--	--
Bay and magnolia	151,904	31,793	37,632	24,605	27,188	10,412	5,683	8,175	2,072	1,758	843	1,743	--	--	--	--	--
Black cherry	14,014	3,664	2,615	2,155	1,466	772	927	660	1,263	--	--	492	--	--	--	--	--
Black walnut	3,282	--	--	--	--	734	506	--	852	584	--	606	--	--	--	--	--
Sycamore	14,080	559	967	1,077	--	1,466	637	440	--	1,270	--	6,768	896	--	--	--	--
Elm	90,456	2,664	7,976	5,415	6,477	11,360	16,852	9,886	8,299	5,785	6,260	8,035	1,447	--	--	--	--
Other eastern hardwoods	369,241	80,742	89,514	78,290	50,327	22,395	20,179	8,418	10,120	4,570	2,865	1,821	--	--	--	--	--
Total hardwoods	6,080,162	432,431	587,767	597,774	625,674	655,010	676,734	621,729	544,728	409,605	301,776	468,831	158,103	--	--	--	--
All species	9,601,316	483,801	756,224	983,576	1,123,128	1,107,995	1,119,354	1,062,138	923,264	698,941	470,637	680,289	191,969	--	--	--	--

Table 39.--Green weight of forest biomass on commercial forest land, by species and diameter class, Northern Coastal Plain of North Carolina, 1984

Species	All classes	Diameter class (inches at breast height)												29.0 and larger
		1.0- 2.9	3.0- 4.9	5.0- 6.9	7.0- 8.9	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9		
----- Hundred thousand pounds -----														
Softwood:														
Longleaf pine	39,967	181	438	1,437	2,622	6,639	8,596	7,375	8,920	3,271	488	--	--	--
Slash pine	11,703	16	--	1,533	3,788	4,746	1,208	412	--	--	--	--	--	--
Shortleaf pine	28,925	194	347	1,048	4,275	8,444	5,873	6,686	1,657	401	--	--	--	--
Loblolly pine	1,829,199	19,992	77,091	210,873	258,405	214,074	227,999	241,659	220,163	164,736	92,177	98,662	3,368	--
Pond pine	363,426	3,837	15,145	38,036	75,715	82,973	67,318	39,340	17,882	13,441	6,516	3,223	--	--
Baldcypress	176,626	939	1,654	2,294	5,145	12,629	9,366	18,646	19,225	19,248	18,544	46,973	21,963	--
Pondcypress	29,820	69	--	573	2,274	1,211	950	3,500	4,202	4,601	2,292	3,013	7,135	--
Cedars	51,030	1,984	5,365	8,372	11,451	6,354	6,666	3,778	2,673	2,893	565	929	--	--
Total softwoods	2,530,696	27,212	100,040	264,166	363,675	337,070	327,976	321,396	274,722	208,591	120,582	152,800	32,466	--
Hardwood:														
Select white oaks	373,853	8,362	15,123	20,419	32,343	43,853	48,099	46,736	42,677	42,542	21,366	36,473	15,860	--
Select red oaks	87,501	1,578	1,909	806	4,488	5,443	7,087	6,905	9,793	9,294	6,216	18,785	15,197	--
Chestnut oak	23	23	--	--	--	--	--	--	--	--	--	--	--	--
Other white oaks	88,368	2,208	2,917	5,227	8,504	6,560	9,004	10,623	9,470	9,480	2,678	13,784	7,913	--
Other red oaks	418,373	18,693	26,849	31,700	49,050	54,449	48,894	41,955	28,257	42,724	17,434	42,022	16,346	--
Hickory	62,048	2,839	2,711	3,828	6,672	6,855	4,996	5,554	3,326	7,409	8,016	8,953	889	--
Soft maple	790,796	88,620	106,508	78,548	94,993	95,237	84,948	74,645	58,988	33,991	28,993	39,551	5,774	--
Beech	65,902	952	2,313	1,070	4,371	5,297	4,612	9,216	12,058	4,508	6,631	12,112	2,762	--
Sweetgum	728,894	49,291	64,201	72,832	71,830	89,375	105,018	82,222	72,314	48,443	30,024	36,777	6,567	--
Tupelo and blackgum	1,109,404	36,853	58,791	57,280	75,490	102,476	133,064	134,979	126,419	89,579	82,177	127,567	84,729	--
Ash	115,191	10,353	15,639	15,361	15,671	12,579	14,133	9,576	8,705	5,260	2,907	4,686	321	--
Cottonwood	25,568	965	2,315	2,125	2,312	3,259	2,107	3,996	2,981	1,903	980	2,625	--	--
Yellow-poplar	268,472	5,494	7,781	8,205	15,497	23,216	29,636	40,315	37,913	24,486	30,477	38,923	6,529	--
Bay and magnolia	93,710	19,604	22,565	12,597	16,646	7,167	4,405	6,069	1,540	1,373	654	1,090	--	--
Black cherry	8,621	1,725	1,658	1,305	1,110	472	615	484	858	--	--	394	--	--
Black walnut	3,160	--	--	--	--	610	511	--	785	594	--	660	--	--
Sycamore	10,777	386	677	549	--	1,038	492	462	--	939	--	5,317	917	--
Elm	61,356	1,942	5,539	3,021	4,118	7,496	11,390	6,727	5,575	3,890	4,175	5,681	1,802	--
Other eastern hardwoods	267,398	63,136	70,276	45,549	33,259	15,087	17,014	7,384	8,672	3,430	2,243	1,348	--	--
Total hardwoods	4,579,415	313,024	407,772	360,422	436,354	480,469	526,025	487,848	430,331	329,845	244,971	396,748	165,606	--
All species	7,110,111	340,236	507,812	624,588	800,029	817,539	854,001	809,244	705,053	538,436	365,553	549,548	198,072	--

Table 40.--Net annual growth and removals of all live timber and growing stock on commercial forest land, by species, Northern Coastal Plain of North Carolina, 1983

Species	All live timber ^a		Growing stock	
	Net annual growth	Annual timber removals	Net annual growth	Annual timber removals
----- Thousand cubic feet -----				
Softwood:				
Yellow pines	122,507	123,863	122,248	123,167
Eastern white pine	--	--	--	--
Spruce and fir	--	--	--	--
Cypress	5,274	1,733	5,219	1,684
Other eastern softwoods	2,016	4,599	2,009	4,599
Total softwoods	129,797	130,195	129,476	129,450
Hardwood:				
Select white and red oaks	16,041	11,966	15,892	11,535
Other white and red oaks	17,334	17,670	16,987	16,324
Hickory	1,564	668	1,528	668
Yellow birch	--	--	--	--
Hard maple	--	62	--	62
Sweetgum	27,708	20,966	27,104	19,729
Ash, walnut, and black cherry	3,696	1,314	3,355	1,154
Yellow-poplar	17,370	8,812	17,271	8,547
Tupelo and blackgum	21,908	14,421	21,163	11,563
Bay and magnolia	3,169	1,795	2,865	1,076
Other eastern hardwoods	37,736	19,184	34,465	13,865
Total hardwoods	146,526	96,858	140,630	84,523
All species	276,323	227,053	270,106	213,973

^aMerchantable portion only.

Table 41.--Net annual growth and removals of sawtimber on commercial forest land, by species, Northern Coastal Plain of North Carolina, 1983

Species	Net annual growth	Annual timber removals
- - Thousand board feet - -		
Softwood:		
Yellow pines	503,622	542,083
Eastern white pine	--	--
Spruce and fir	--	--
Cypress	28,045	8,393
Other eastern softwoods	7,178	14,739
Total softwoods	538,845	565,215
Hardwood:		
Select white and red oaks	65,587	38,191
Other white and red oaks	73,157	54,353
Hickory	5,958	839
Yellow birch	--	--
Hard maple	--	--
Sweetgum	100,591	61,763
Ash, walnut, and black cherry	10,900	2,803
Yellow-poplar	88,863	37,760
Tupelo and blackgum	89,868	40,586
Bay and magnolia	3,933	967
Other eastern hardwoods	98,031	33,143
Total hardwoods	536,888	270,405
All species	1,075,733	835,620

Table 42.--Annual removals of growing stock on commercial forest land, by species and diameter class, Northern Coastal Plain of North Carolina, 1983

Species	All classes	Diameter class (inches at breast height)										Thousand cubic feet	
		5.0- 6.9	7.0- 8.9	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9	29.0 and larger		
Softwood:													
Yellow pines	123,167	5,870	13,597	13,626	17,824	19,610	18,818	16,747	7,518	8,960	597		
Eastern white pine	--	--	--	--	--	--	--	--	--	--	--		
Spruce and fir	--	--	--	--	--	--	--	--	--	--	--		
Cypress	1,684	--	--	--	--	170	622	469	229	194	--		
Other eastern softwoods	4,599	680	599	1,237	934	724	81	250	--	94	--		
Total softwoods	129,450	6,550	14,196	14,863	18,758	20,504	19,521	17,466	7,747	9,248	597		
Hardwood:													
Select white and red oaks	11,535	619	1,479	1,430	1,511	1,881	1,538	866	816	1,281	114		
Other white and red oaks	16,324	1,642	1,973	1,866	2,661	1,376	1,447	2,103	1,119	1,432	705		
Hickory	668	121	151	241	--	--	--	--	155	--	--		
Yellow birch	--	--	--	--	--	--	--	--	--	--	--		
Hard maple	62	62	--	--	--	--	--	--	--	--	--		
Sweetgum	19,729	2,239	3,622	2,054	1,976	2,240	2,246	1,567	1,543	2,106	136		
Ash, walnut, and black cherry	1,154	156	81	189	471	104	153	--	--	--	--		
Yellow-poplar	8,547	335	596	667	1,228	701	1,388	972	706	1,806	148		
Tupelo and blackgum	11,563	496	1,156	1,232	1,765	1,471	1,785	1,638	915	977	128		
Bay and magnolia	1,076	198	278	340	162	--	98	--	--	--	--		
Other eastern hardwoods	13,865	1,543	2,850	2,061	1,783	1,194	1,538	1,222	683	591	400		
Total hardwoods	84,523	7,411	12,186	10,080	11,557	8,967	10,193	8,368	5,937	8,193	1,631		
All species	213,973	13,961	26,382	24,943	30,315	29,471	29,714	25,834	13,684	17,441	2,228		

Table 43.--Mortality of all live timber, growing stock, and saw-timber on commercial forest land, by species, Northern Coastal Plain of North Carolina, 1983

Species	All live timber ^a	Growing stock	Sawtimber
	Thousand cubic feet	Thousand board feet	
Softwood:			
Yellow pines	26,203	25,797	71,624
Eastern white pine	--	--	--
Spruce and fir	--	--	--
Cypress	474	474	1,058
Other eastern softwoods	565	507	1,636
Total softwoods	27,242	26,778	74,318
Hardwood:			
Select white and red oaks	1,536	1,439	3,558
Other white and red oaks	3,473	2,844	6,421
Hickory	74	--	--
Yellow birch	--	--	--
Hard maple	--	--	--
Sweetgum	2,186	1,418	3,377
Ash, walnut, and black cherry	904	207	--
Yellow-poplar	535	535	1,097
Tupelo and blackgum	3,402	1,266	3,958
Bay and magnolia	797	527	574
Other eastern hardwoods	9,688	5,004	11,719
Total hardwoods	22,595	13,240	30,704
All species	49,837	40,018	105,022

^aMerchantable portion only.

Table 44.--Change in number of all live trees on commercial forest land, by species group, survey completion date, and diameter class, Northern Coastal Plain of North Carolina

Species group and year	All classes	Diameter class (inches at breast height)									
		1.0- 2.9	3.0- 4.9	5.0- 6.9	7.0- 8.9	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0 and larger		
----- Thousand trees -----											
Yellow pine											
1974	704,153	314,912	155,181	94,342	57,260	32,586	20,815	13,982	15,075		
1984	624,675	217,755	153,860	111,113	64,954	31,582	18,874	12,048	14,489		
Change	-79,478	-97,157	-1,321	+16,771	+7,694	-1,004	-1,941	-1,934	-586		
Other softwood											
1974	41,383	17,501	8,474	4,637	3,184	2,547	1,824	1,308	1,908		
1984	39,431	18,012	7,682	4,072	3,109	1,879	1,032	1,044	2,601		
Change	-1,952	+511	-792	-565	-75	-668	-792	-264	+693		
Hardwood											
1974	3,169,994	2,298,207	490,974	170,199	88,763	49,507	29,598	18,146	24,600		
1984	2,653,113	1,841,444	437,475	161,085	83,138	48,168	31,420	20,038	30,345		
Change	-516,881	-456,763	-53,499	-9,114	-5,625	-1,339	+1,822	+1,892	+5,745		

Table 45.--Land area, by class, major forest type, and survey completion date, Northern Coastal Plain of North Carolina

Land use class	Survey completion date			Change 1974-1984
	1963	1974	1984	
----- Acres -----				
Forest land:				
Commercial forest land:				
Pine and oak-pine types	2,540,198	2,238,979	1,951,370	-287,609
Hardwood types	1,707,683	1,871,400	1,809,967	-61,433
Total	4,247,881	4,110,379	3,761,337	-349,042
Noncommercial forest land:				
Productive-reserved	700	1,756	28,072	+26,316
Unproductive	38,164	34,172	31,567	-2,605
Total	38,864	35,928	59,639	+23,711
Nonforest land:				
Cropland	1,733,301	1,814,616	2,071,927	+257,311
Pasture and range	181,996	91,656	77,896	-13,760
Other	442,262	582,110	691,110	+109,000
Total	2,357,559	2,488,382	2,840,933	+352,551
All land^a	6,644,304	6,634,689	6,661,909	+27,220

^aExcludes all water areas.

Table 46.--Volume^a of sawtimber, growing stock, and all live timber on commercial forest land, by species group, survey completion date, and diameter class, Northern Coastal Plain of North Carolina

Species group and year	All classes	Diameter class (inches at breast height)									
		5.0- 6.9	7.0- 8.9	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0 and larger	
SAWTIMBER (in thousand board feet)											
Softwood											
1963	11,548,678	--	--	1,520,255	2,209,378	2,442,302	2,143,046	1,436,031	784,005	1,013,661	
1974	10,902,517	--	--	1,461,457	1,943,507	2,281,079	2,076,974	1,423,570	789,077	926,853	
1984	10,614,425	--	--	1,392,055	1,708,550	1,952,885	1,839,670	1,498,349	914,144	1,308,772	
Hardwood											
1963	9,208,882	--	--	--	1,464,649	1,654,155	1,621,440	1,519,848	891,118	2,057,672	
1974	9,174,743	--	--	--	1,641,678	1,778,952	1,593,885	1,323,232	916,873	1,920,123	
1984	10,916,025	--	--	--	1,742,041	1,964,559	1,910,425	1,586,346	1,204,886	2,507,768	
GROWING STOCK (in thousand cubic feet)											
Softwood											
1963	2,838,853	214,969	319,191	420,076	492,615	478,695	385,232	243,395	127,377	157,303	
1974	2,760,998	231,776	358,292	403,829	433,335	447,095	373,355	241,283	128,201	143,832	
1984	2,758,111	270,275	403,219	384,633	380,961	382,773	330,708	253,938	148,512	203,092	
Hardwood											
1963	3,113,967	289,697	375,914	410,016	433,200	410,155	360,000	309,920	171,270	353,795	
1974	3,326,531	334,277	444,156	491,365	485,560	441,099	353,882	269,827	176,220	330,145	
1984	3,623,077	316,351	415,838	478,037	515,282	487,118	424,202	323,472	231,577	431,200	
ALL LIVE TIMBER ^b (in thousand cubic feet)											
Softwood											
1963	2,864,271	218,486	322,011	422,106	496,962	481,799	387,662	244,099	127,377	163,769	
1974	2,785,649	235,570	361,455	405,786	437,159	449,985	375,712	242,001	128,201	149,780	
1984	2,784,596	273,771	407,267	386,428	384,456	385,300	332,741	254,684	148,512	211,437	
Hardwood											
1963	3,473,155	368,753	438,730	454,421	467,932	433,299	383,915	324,927	184,842	416,336	
1974	3,717,849	425,498	518,376	544,577	524,477	465,989	377,400	282,883	190,193	388,456	
1984	4,038,412	402,802	485,933	529,706	556,657	514,626	452,384	339,093	249,876	507,335	

^aTo provide a basis for valid comparisons, adjustments have been made to allow for differences in volume tables and sawtimber specifications used in previous surveys.

^bMerchantable volume.

Davenport, Edgar L.

Forest statistics for the Northern Coastal Plain of North Carolina, 1984. Resour. Bull. SE-74. Asheville, NC: Department of Agriculture, Forest Service, Southeastern Forest Experiment Station; 1984. 50 p.

Since the fourth inventory of the forest resources of the Northern Coastal Plain of North Carolina in 1974, the area of commercial forest land decreased by 349,000 acres, or by 8 percent. Inventory of softwood growing stock remained stable at 2.8 billion cubic feet, while the volume of hardwood growing stock increased by 9 percent. Net annual growth of hardwood exceeded annual removals by 66 percent. Annual removals of pine growing stock exceeded net annual growth by more than 30 percent on nonindustrial private forest land, while net annual growth of pines exceeded removals by 49 percent on forest industry land.

KEYWORDS: Commercial forest land, forest ownership, timber volume, timber growth, timber removals, forest trends.

Davenport, Edgar L.

Forest statistics for the Northern Coastal Plain of North Carolina, 1984. Resour. Bull. SE-74. Asheville, NC: Department of Agriculture, Forest Service, Southeastern Forest Experiment Station; 1984. 50 p.

Since the fourth inventory of the forest resources of the Northern Coastal Plain of North Carolina in 1974, the area of commercial forest land decreased by 349,000 acres, or by 8 percent. Inventory of softwood growing stock remained stable at 2.8 billion cubic feet, while the volume of hardwood growing stock increased by 9 percent. Net annual growth of hardwood exceeded annual removals by 66 percent. Annual removals of pine growing stock exceeded net annual growth by more than 30 percent on nonindustrial private forest land, while net annual growth of pines exceeded removals by 49 percent on forest industry land.

KEYWORDS: Commercial forest land, forest ownership, timber volume, timber growth, timber removals, forest trends.



The Forest Service, U.S. Department of Agriculture, is dedicated to the principle of multiple use management of the Nation's forest resources for sustained yields of wood, water, forage, wildlife, and recreation. Through forestry research, cooperation with the States and private forest owners, and management of the National Forests and National Grasslands, it strives—as directed by Congress—to provide increasingly greater service to a growing Nation.

USDA policy does not permit discrimination because of race, color, national origin, sex or religion. Any person who believes he or she has been discriminated against in any USDA-related activity should write immediately to the Secretary of Agriculture, Washington, D.C. 20250.